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THE YEAR'S GREATEST SCIENCE-FICTION AND FANTASY

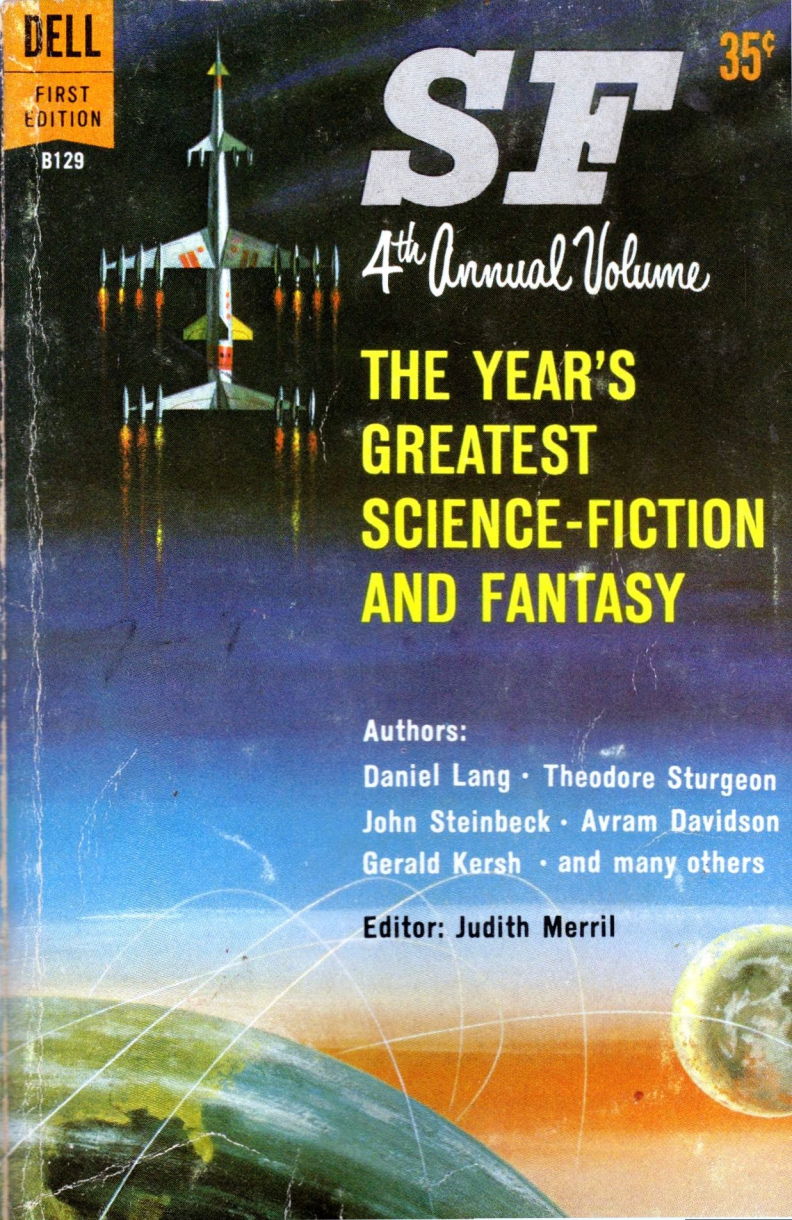
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Gerald Kersh • and many others

Editor: Judith Merrill



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- The mental patient who insists to his psychiatrist that the six people he'd murdered were actually Venusian lizards
- A blood-chilling examination of the ultimate in future TV spectacles
- The huntsman haunted by the memory of a new kind of prey encountered on a remote planet
- Bears who make prisoners of the remnants of mankind
- Russian and American manned satellites that pass in space

**. . . and many other facts and fantasies of
the future**

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**THE YEAR'S
GREATEST
SCIENCE-FICTION
and FANTASY**

FOURTH ANNUAL VOLUME

**Edited by
JUDITH MERRIL**

A DELL FIRST EDITION

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INTRODUCTION

by Judith Merrill

You've heard the one about the old egghead (slightly cracked, but not quite addled yet) who's got this gorgeous girl assistant, and this formula (or Frankenstein, or maybe a giant ant). Anyhow, the old boy means well, but he just can't stop himself. (*One more experiment!* he says each time, *and then I'll quit.*) And he would have sure enough destroyed the world if the young reporter (or engineer, or Marine lieutenant) didn't bust in the door and marry the poor girl *just* in time.

Well, maybe I got it a little mixed up, but you know the one I mean. What I wanted to say was . . . you won't find it here.

The name of this book is *SF*.

SF is an abbreviation for Science Fiction (or Science Fantasy). Science Fantasy (or Science Fiction) is really an abbreviation too. Here are *some* of the things it stands for. . . .

S is for Science, Space, Satellites, Starships, and Solar exploring; also for Semantics and Sociology, Satire, Spoofing, Suspense, *and* good old Serendipity. (But *not* Spelling, without which I could have added Psychology, Civilizations, and *Psi* without parentheses.)

F is for Fantasy, Fiction and Fable, Folklore, Fairy-tale and Farce; also for Fission and Fusion; for Firmament, Fireball, Future and Forecast; for Fate and Free-will; Figuring, Fact-seeking, and Fancy-free.

Mix well. The result is *SF*, or *Speculative Fun*. . . .

Happy reading.

—J. M.

PELT

by Carol Emshwiller

Does your science-fiction magazine look different lately?

If it does, there's a fair chance (one in six, by my count) that Carol Emshwiller is a good part of the reason why.

The reason for that is that Mrs. Emshwiller—who is now a housewife, mother of three pre-schoolers, married to a rising young professional man, in the world's most suburb, Levittown, Long Island—once went to Italy on a Fulbright fellowship to study art.

No, she does not illustrate her own stories. Her husband, the young professional man who was also in Italy on a Fulbright, usually does; Carol just poses. (Frequently, I mean. You'll find "Emsh" on the cover of just about every third s-f magazine these days; on just about half of those you'll find a girl who is—usually recognizably—Mrs. "Emsh.")

Carol Emshwiller is typical of a number of new authors in the field in that she has been writing for about five years, on a part-time basis. She is completely atypical (of anything or anybody) in the individuality of her style, the uniqueness of her perceptions, and the seemingly effortless clarity with which she conveys them.

"Pelt" is the story of a dog and a man on a hunting trip on a far distant planet in a future perhaps not too remote.

She was a white dog with a wide face and eager eyes, and this was the planet, Jaxa, in winter.

She trotted well ahead of the master, sometimes nose to ground, sometimes sniffing the air, and she didn't care if they were being watched or not. She knew that strange things skulked behind iced trees, but strangeness was her job. She had been trained for it, and crisp, glittering Jaxa was, she felt, exactly what she *had* been trained for, *born* for.

I love it, I love it . . . that was in her pointing ears, her

waving tail . . . I *love* this place.

It was a world of ice, a world with the sound of breaking goblets. Each time the wind blew they came shattering down by the trayful, and each time one branch brushed against another, it was: Skoal, Down the hatch, To the Queen . . . tink, tink, tink. And the sun was reflected as if from a million cut-glass punch bowls under a million crystal chandeliers.

She wore four little black boots, and each step she took sounded like two or three more goblets gone, but the sound was lost in the other tinkling, snapping, cracklings of the silver, frozen forest about her.

She had figured out at last what that hovering scent was. It had been there from the beginning, the landing two days ago, mingling with Jaxa's bitter air and seeming to be just a part of the smell of the place, she found it in crisscrossing trails about the squatting ship, and hanging, heavy and recent, in hollows behind flat-branched, piney-smelling bushes. She thought of honey and fat men and dry fur when she smelled it.

There was something big out there, and more than one of them, more than two. She wasn't sure how many. She had a feeling this was something to tell the master, but what was the signal, the agreed upon noise for: We are being watched? There was a whisper of sound, short and quick, for: Sighted close, come and shoot. And there was a noise for danger (all these through her throat mike to the receiver at the master's ear), a special, howly bark: Awful, awful—there is something awful going to happen. There was even a noise, a low, rumble of sound for: Wonderful, wonderful fur—drop everything and come after *this* one. (And she knew a good fur when she saw one. She had been trained to know.) But there was no sign for: We are being watched.

She'd whined and barked when she was sure about it, but that had got her a pat on the head and a rumpling of the neck fur. "You're doing fine, Baby. This world is our oyster, all ours. All we got to do is pick up the pearls. Jaxa's what we've been waiting for." And Jaxa was, so she did her work and didn't try to tell him any more, for what was one more strange thing in one more strange world?

She was on the trail of something now, and the master was behind her, out of sight. He'd better hurry. He'd better hurry or there'll be waiting to do, watching the thing, whatever it is, steady on until he comes, holding tight back, and that will be hard. Hurry, hurry.

She could hear the whispered whistle of a tune through the receiver at her ear and she knew he was not hurrying but just being happy. She ran on, eager, curious. She did not give the signal for hurry, but she made a hurry sound of her own, and she heard him stop whistling and whisper back into the mike, "So, so, Queen of Venus. The furs are waiting to be picked. No hurry, Baby." But morning was to her for hurry. There was time later to be tired and slow.

That fat-man honeyish smell was about, closer and strong. Her curiosity became two pronged—this smell or that? What is the big thing that watches? She kept to the trail she was on, though. Better to be sure, and this thing was not so elusive, not twisting and doubling back, but up ahead and going where it was going.

She topped a rise and half slid, on thick furred rump, down the other side, splattering ice. She snuffled at the bottom to be sure of the smell again, and then, nose to ground, trotted past a thick and tangled hedgerow.

She was thinking through her nose now. The world was all smell, crisp air and sour ice and turpentine pine . . . and this animal, a urine and brown grass thing . . . and then, strong in front of her, honey-furry-fat man.

She felt it looming before she raised her head to look, and there it was, the smell in person, some taller than the master and twice as wide. Counting his doubled suit and all, twice as wide.

This was a fur! Wonderful, wonderful. But she just stood, looking up, mouth open and lips pulled back, the fur on the back of her neck rising more from the suddenness than from fear.

It was silver and black, a tiger-striped thing, and the whitish parts glistened and caught the light as the ice of Jaxa did, and sparkled and dazzled in the same way. And there, in the center of the face, was a large and terrible orange eye, rimmed in black with black radiating lines crossing the fore-

head and rounding the head. That spot of orange dominated the whole figure, but it was a flat, blind eye, unreal, grown out of fur. At first she saw only that spot of color, but then she noticed under it two small, red glinting eyes and they were kind, not terrible.

This was the time for the call: Come, come and get the great fur, the huge-price-tag fur for the richest lady on earth to wear and be dazzling in and most of all to pay for. But there was something about the flat, black nose and the tender, bow-shaped lips and those kind eyes that stopped her from calling. Something masterlike. She was full of wondering and indecision and she made no sound at all.

The thing spoke to her then, and its voice was a deep lullaby sound of buzzing cellos. It gestured with a thick, fur-backed hand. It promised, offered, and asked; and she listened, knowing and not knowing.

The words came slowly. *This . . . is . . . world.*

Here is the sky, the earth, the ice. The heavy arms moved. The hands pointed.

We have watched you, little slave. What have you done that is free today? Take the liberty. Here is the earth for your four shod feet, the sky of stars, the ice to drink. Do something free today. Do, do.

Nice voice, she thought, nice thing. It gives and gives . . . something.

Her ears pointed forward, then to the side, one and then the other, and then forward again. She cocked her head, but the real meaning would not come clear. She poked at the air with her nose. Say that again, her whole body said. I almost have it. I *feel* it. Say it once more and maybe then the sense of it will come.

But the creature turned and started away quickly, very quickly for such a big thing, and disappeared behind the trees and bushes. It seemed to shimmer itself away until the glitter was only the glitter of the ice and the black was only the thick, flat branches.

The master was close. She could hear his crackling steps coming up behind her.

She whined softly, more to herself than to him.

"Ho, the Queen, Aloora. Have you lost it?" She sniffed

the ground again. The honey-furry smell was strong. She sniffed beyond, zigzagging. The trail was there. "Go to it, Baby." She loped off to a sound like Chinese wind chimes, businesslike again. Her tail hung guiltily, though, and she kept her head low. She had missed an important signal. She'd waited until it was too late. But was the thing a man, a master? Or a fur? She wanted to do the right thing. She always tried and tried for that, but now she was confused.

She was getting close to whatever it was she trailed, but the hovering smell was still there too, though not close. She thought of gifts. She knew that much from the slow, lullaby words, and gifts made her think of bones and meat, not the dry fishy biscuit she always got on trips like this. A trickle of drool flowed from the side of her mouth and froze in a silver thread across her shoulder.

She slowed. The thing she trailed must be there, just behind the next row of trees. She made a sound in her throat . . . ready, steady . . . and she advanced until she was sure. She sensed the shape. She didn't really see it . . . mostly it was the smell and something more in the tinkling glassware noises. She gave the signal and stood still, a furry, square imitation of a pointer. Come, hurry. This waiting is the hardest part.

He followed, beamed to her radio. "Steady, Baby. Hold that pose. Good girl, good girl." There was only the slightest twitch of her tail as she wagged it, answering him in her mind.

He came up behind her and then passed, crouched, holding the rifle before him, elbows bent. He knelt then, and waited as if at a point of his own, rifle to shoulder. Slowly he turned with the moving shadow of the beast, and shot, twice in quick succession.

They ran forward then, together, and it was what she had expected—a deerlike thing, dainty hoofs, proud head, and spotted in three colors, large gray-green rounds on tawny yellow, with tufts of that same glittering silver scattered over.

The master took out a sharp, flat-bladed knife. He began to whistle out loud as he cut off the handsome head. His face was flushed.

She sat down near by, mouth open in a kind of smile, and she watched his face as he worked. The warm smell made the drool come at the sides of her mouth and drip out to freeze on the ice and on her paws, but she sat quietly, only watching.

Between the whistlings he grunted and swore and talked to himself, and finally he had the skin and the head in a tight, inside out bundle.

Then he came to her and patted her sides over the ribs with the flat, slap sound, and he scratched behind her ears and held a biscuit to her on his thick-gloved palm. She swallowed it whole and then watched him as he squatted on his heels and himself ate one almost like it.

Then he got up and slung the bundle of skin and head across his back. "I'll take this one, Baby. Come on, let's get one more something before lunch." He waved her to the right. "We'll make a big circle," he said.

She trotted out, glad she was not carrying anything. She found a strong smell at a patch of discolored ice and urinated on it. She sniffed and growled at a furry, mammal-smelling bird that landed in the trees above her and sent down a shower of ice slivers on her head. She zigzagged and then turned and bit, lips drawn back in mock rage, at a branch that scraped her side.

She followed for a while the chattery sound of water streaming along under the ice, and left it where an oily, lambish smell crossed. Almost immediately she came upon them—six, small, greenish balls of wool with floppy, woolly feet. The honey-fat man smell was strong here too, but she signaled for the lambs, the Come and shoot sound, and she stood again waiting for the master. "*Good* girl!" His voice had a special praise. "By God, this place is a gold mine. Hold it, Queen of Venus. Whatever it is, don't let go."

There was a fifty-yard clear view here and she stood in plain sight of the little creatures, but they didn't notice. The master came slowly and cautiously, and knelt beside her. Just as he did, there appeared at the far end of the clearing a glittering, silver and black tiger-striped man.

She heard the sharp inward breath of the master and she felt the tenseness come to him. There was a new, faint whiff

of sour sweat, a stiff silence and a special way of breathing. What she felt from him made the fur rise along her back with a mixture of excitement and fear.

The tiger thing held a small packet in one hand and was peering into it and pulling at the opening in it with a blunt finger. Suddenly there was a sweep of motion beside her and five fast, frantic shots sounded sharp in her ear. Two came after the honey-fat man had already fallen and lay like a huge decorated sack.

The master ran forward and she came at his heels. They stopped, not too close, and she watched the master looking at the big, dead tiger head with the terrible eye. The master was breathing hard and seemed hot. His face was red and puffy looking, but his lips made a hard whitish line. He didn't whistle or talk. After a time he took out his knife. He tested the blade, making a small, bloody thread of a mark on his left thumb. Then he walked closer and she stood and watched him and whispered a questioning whine.

He stooped by the honey-fat man and it was that small, partly opened packet that he cut viciously through the center. Small round chunks fell out, bite-sized chunks of dried meat and a cheesy substance and some broken bits of clear, bluish ice.

The master kicked at them. His face was not red any more, but olive-pale. His thin mouth was open in a grin that was not a grin. He went about the skinning then.

He did not keep the flat-faced, heavy head nor the blunt-fingered hands.

The man had to make a sliding thing of two of the widest kind of flat branches to carry the new heavy fur, as well as the head and the skin of the deer. Then he started directly for the ship.

It was past eating time but she looked at his restless eyes and did not ask about it. She walked before him, staying close. She looked back often, watching him pull the sled thing by the string across his shoulder and she knew, by the way he held the rifle before him in both hands, that she should be wary.

Sometimes the damp-looking, inside-out bundle hooked

on things, and the master would curse in a whisper and pull at it. She could see the bundle made him tired, and she wished he would stop for a rest and food as they usually did long before this time.

They went slowly, and the smell of honey-fat man hovered as it had from the beginning. They crossed the trails of many animals. They even saw another deer run off, but she knew that it was not a time for chasing.

Then another big silver and black tiger stood exactly before them. It appeared suddenly, as if actually it had been standing there all the time, and they had not been near enough to see it, to pick it out from its glistening background.

It just stood and looked and dared, and the master held his gun with both hands and looked too, and she stood between them glancing from one face to the other. She knew, after a moment, that the master would not shoot, and it seemed the tiger thing knew too, for it turned to look at her and it raised its arms and spread its fingers as if grasping at the forest on each side. It swayed a bit, like bigness off balance, and then it spoke in its tight-strung, cello tones. The words and the tone seemed the same as before.

Little slave, what have you done that is free today? Remember this is world. Do something free today. Do, do.

She knew that what it said was important to it, something she should understand, a giving and a taking away. It watched her, and she looked back with wide, innocent eyes, wanting to do the right thing, but not knowing what.

The tiger-fat man turned then, this time slowly, and left a wide back for the master and her to see, and then it half turned, throwing a quick glance over the heavy humped shoulder at the two of them. Then it moved slowly away into the trees and ice, and the master still held the gun with two hands and did not move.

The evening wind began to blow, and there sounded about them that sound of a million chandeliers tinkling and clinking like gigantic wind chimes. A furry bird, the size of a shrew and as fast, flew by between them with a miniature shriek.

She watched the master's face, and when he was ready

she went along beside him. The soft sounds the honey-fat man had made echoed in her mind but had no meaning.

That night the master stretched the big skin on a frame and afterward he watched the dazzle of it. He didn't talk to her. She watched him a while and then she turned around three times on her rug and lay down to sleep.

The next morning the master was slow, reluctant to go out. He studied charts of other places, round or hourglass-shaped maps with yellow dots and labels, and he drank his coffee standing up looking at them. But finally they did go out, squinting into the ringing air.

It was her world. More each day, she felt it was so, right feel, right temperature, lovely smells. She darted on ahead as usual, yet not too far today, and sometimes she stopped and waited and looked at the master's face as he came up. And sometimes she would whine a question before she went on . . . Why don't you walk brisk, brisk, and call me Queen of Venus, Aloora, Galaxa, or Bitch of Betelgeuse? Why don't you sniff like I do? Sniff, and you will be happy with this place . . . And she would run on again.

Trails were easy to find, and once more she found the oily lamb smell, and once more came upon them quickly. The master strode up beside her and raised his gun . . . but a moment later he turned, carelessly, letting himself make a loud noise, and the lambs ran. He made a face, and spit upon the ice. "Come on, Queen. Let's get out of here. I'm sick of this place."

He turned and made the signal to go back, pointing with his thumb above his head in two jerks of motion.

But why, why? This is morning now and our world. She wagged her tail and gave a short bark, and looked at him, dancing a little on her back paws, begging with her whole body. "Come on," he said.

She turned then, and took her place at his heel, head low, but eyes looking up at him, wondering if she had done something wrong, and wanting to be right and noticed and loved because he was troubled and preoccupied.

They'd gone only a few minutes on the way back when he stopped suddenly in the middle of a step, slowly put both

feet flat upon the ground and stood like a soldier at a stiff, off-balance attention. There, lying in the way before them, was the huge, orange-eyed head and in front of it, as if at the end of outstretched arms, lay two leathery hands, the hairless palms up.

She made a growl deep in her throat and the master made a noise almost exactly like hers, but more a groan. She waited for him, standing as he stood, not moving, feeling his tenseness coming in to her. Yet it was just a head and two hands of no value, old ones they had had before and thrown away.

He turned and she saw a wild look in his eyes. He walked with deliberate steps, and she followed, in a wide circle about the spot. When they had skirted the place, he began to walk very fast.

They were not far from the ship. She could see its flat blackness as they drew nearer to the clearing where it was, the burned, iceless pit of spewed and blackened earth. And then she saw that the silver tiger men were there, nine of them in a wide circle, each with the honey-damp fur smell, but each with a separate particular sweetness.

The master was still walking very fast, eyes down to watch his footing, and he did not see them until he was there in the circle before them all, standing there like nine upright bears in tiger suits.

He stopped and made a whisper of a groan, and he let the gun fall low in one hand so that it hung loose with the muzzle almost touching the ground. He looked from one to the other and she looked at him, watching his pale eyes move along the circle.

"Stay," he said, and then he began to go toward the ship at an awkward limp, running and walking at the same time, banging the gun handle against the air lock as he entered.

He had said, Stay. She sat watching the ship door and moving her front paws up and down because she wanted to be walking after him. He was gone only a few minutes, though, and when he came back it was without the gun and he was holding the great fur with cut pieces of thongs dangling like ribbons along its edges where it had been tied to the stretching frame. He went at that same run-walk, unbal-

anced by the heavy bundle, to one of them along the circle. Three gathered together before him and refused to take it back. They pushed it, bunched loosely, back across his arms again and to it they added another large and heavy package in a parchment bag, and the master stood, with his legs wide to hold it all.

Then one honey-fat man motioned with a fur-backed hand to the ship and the bundles, and then to the ship and the master, and then to the sky. He made two sharp sounds once, and then again. And another made two different sounds, and she felt the feeling of them . . . Take your things and go home. Take them, these and these, and go.

They turned to her then and one spoke and made a wide gesture. *This is world. The sky, the earth, the ice.*

They wanted her to stay. They gave her . . . was it their world? But what good was a world?

She wagged her tail hesitantly, lowered her head and looked up at them . . . I do want to do right, to please everybody, everybody, but . . . Then she followed the master into the ship.

The locks rumbled shut. "Let's get out of here," he said. She took her place, flat on her side, take-off position. The master snapped the flat plastic sheet over her, covering head and all and, in a few minutes, they roared off.

Afterward he opened the parchment bag. She knew what was in it. She knew he knew too, but she knew by the smell. He opened it and dumped out the head and the hands. His face was tight and his mouth stiff.

She saw him almost put the big head out the waste chute, but he didn't. He took it in to the place where he kept good heads and some odd paws or hoofs, and he put it by the others there.

Even she knew this head was different. The others were all slant-browed like she was and most had jutting snouts. This one seemed bigger than the big ones, with its heavy, ruffed fur and huge eye staring, and more grand than any of them, more terrible . . . and yet a flat face, with a delicate, black nose and tender lips.

The tenderest lips of all.

TRIGGERMAN

by J. F. Bone

The *ideal* of the brotherhood of man is hardly new. But the purely practical, businesslike *necessity* for immediate and enduring Peace on Earth—an Earth equipped with space missiles and atomic weapons—is original with this generation.

The development of modern warfare, of rockets, radioactives, and robot controls, has been taken for granted in science fiction for some time—and with it the recognition that international rock-tossing is just too extravagant an entertainment for modern man.

Stemming perhaps from this basic "One World or None" philosophy, and/or from the conflicts of science vs. security (and space goals vs. defense needs), a certain tradition of military-mind-mocking has grown up in s-f. Though here too history is overtaking us. Or at least General Douglas MacArthur has caught up with *Planet Stories* and the bug-eyed monsters. "Because of the recent development of science, the countries of the world must unite," *True Space Secrets* quotes him as saying. "They must make a common front against attack by people from other planets!" (My italics.—J. M.)

It is slightly less startling, but still of interest, to note that in a book full of animal-heroes (a dog, a cat, a mouse, a bear), it's the story about the General that was written by a professor of veterinary medicine.

General Alastair French was probably the most important man in the Western Hemisphere from the hours of 0800 to 1600. Yet all he did was sit in a windowless room buried deeply underground, facing a desk that stood against a wall. The wall was studded with built-in mechanisms. A line of twenty-four-hour clocks was inset near the ceiling, showing the corresponding times in all time zones on Earth. Two huge TV screens below the clocks were flanked on each side by loud-speaker systems. The desk was bare except for three telephones of different colors—red, blue, and white—and a

polished plastic slab inset with a number of white buttons framing a larger one whose red surface was the color of fresh blood. A thick carpet, a chair of peculiar design with broad flat arms, and an ash tray completed the furnishings. Warmed and humidified air circulated through the room from concealed grills at floor level. The walls of the room were painted a soft restful gray, that softened the indirect lighting. The door was steel and equipped with a time lock.

The exact location of the room and the Center that served it was probably the best kept secret in the Western world. Ivan would probably give a good per cent of the Soviet tax take to know precisely where it was, just as the West would give a similar amount to know where Ivan's Center was located. Yet despite the fact that its location was remote, the man behind the desk was in intimate contact with every major military point in the Western Alliance. The red telephone was a direct connection to the White House. The blue was a line that reached to the headquarters of the Joint Chiefs of Staff and to the emergency Capitol hidden in the hills of West Virginia. And the white telephone connected by priority lines with every military center and base in the world that was under Allied control.

General French was that awesome individual often joked about by TV comics who didn't know that he really existed. He was the man who could push the button that would start World War III!

French was aware of his responsibilities and took them seriously. By nature he was a serious man, but, after three years of living with ultimate responsibility, it was no longer the crushing burden that it was at first when the Psychological Board selected him as one of the most inherently stable men on Earth. He was not ordinarily a happy man; his job, and the steadily deteriorating world situation precluded that, but this day was a bright exception. The winter morning had been extraordinarily beautiful, and he loved beauty with the passion of an artist. A flaming sunrise had lighted the whole Eastern sky with golden glory, and the crisp cold air stimulated his senses to appreciate it. It was much too lovely for thoughts of war and death.

He opened the door of the room precisely at 0800, as he

had done for three years, and watched a round, pink-cheeked man in a gray suit rise from the chair behind the desk. Kleinmeister, he thought, neither looked like a general nor like a potential executioner of half the world. He was a Santa Claus without a beard. But appearances were deceiving. Hans Kleinmeister could, without regret, kill half the world if he thought it was necessary. The two men shook hands, a ritual gesture that marked the changing of the guard, and French sank into the padded chair behind the desk.

"It's a beautiful day outside, Hans," he remarked as he settled his stocky, compact body into the automatically adjusting plastifoam. "I envy you the pleasure of it."

"I don't envy you, Al," Kleinmeister said. "I'm just glad it's all over for another twenty-four hours. This waiting gets on the nerves." Kleinmeister grinned as he left the room. The steel door thudded into place behind him and the time lock clicked. For the next eight hours French would be alone.

He sighed. It was too bad that he had to be confined indoors on a day like this one promised to be, but there was no help for it. He shifted luxuriously in the chair. It was the most comfortable seat that the mind and ingenuity of man could contrive. It had to be. The man who sat in it must have every comfort. He must want for nothing. And above all he must not be irritated or annoyed. His brain must be free to evaluate and decide—and nothing must distract the functioning of that brain. Physical comfort was a means to that end—and the chair provided it. French felt soothed in the gentle caress of the upholstery.

The familiar feeling of detachment swept over him as he checked the room. Nominally, he was responsible to the President and the Joint Chiefs of Staff, but practically he was responsible to no one. No hand but his could set in motion the forces of massive retaliation that had hung over aggression for the past twenty years. Without his sanction no intercontinental or intermediate range missile could leave its rack. He was the final authority, the ultimate judge, and the executioner if need be—a position thrust upon him after years of intensive tests and screening. In this room he was as

close to a god as any man had been since the beginning of time.

French shrugged and touched one of the white buttons on the panel.

"Yes, sir?" an inquiring voice came from one of the speakers.

"A magazine and a cup of coffee," said General French.

"What magazine, sir?"

"Something light—something with pictures. Use your judgment."

"Yes, sir."

French grinned. By now the word was going around Center that the Old Man was in a good humor today. A cup of coffee rose from a well in one of the board arms of the chair, and a magazine extruded from a slot in its side. French opened the magazine and sipped the coffee. General Craig, his relief, would be here in less than eight hours, which would leave him the enjoyment of the second best part of the day if the dawn was any indication. He hoped the sunset would be worthy of its dawn.

He looked at the center clock. The hands read 0817 . . .

At Station 2 along the Dew Line the hands of the station clock read 1217. Although it was high noon it was dark outside, lightened only by a faint glow to the south where the winter sun strove vainly to appear above the horizon. The air was clear, and the stars shone out of the blue-black sky of the polar regions. A radarman bending over his scope stiffened. "Bogey!" he snapped, "Azimuth 0200, coming up fast!"

The bogey came in over the north polar cap, slanting downward through the tenuous wisps of upper atmosphere. The gasses ripped at its metallic sides with friction and oxidation. Great gouts of flaming brilliance spurted from its incandescent outer surface boiling away to leave a trail of sparkling scintillation in its wake. It came with enormous speed, whipping over the Station almost before the operator could hit the general alarm.

The tracking radar of the main line converged upon the target. Electronic computers analyzed its size, speed and

flight path, passing the information to the batteries of interceptor missiles in the sector. "Locked on," a gunnery officer announced in a bored tone. "Fire two." He smiled. Ivan was testing again. It was almost routine, this business of one side or the other sending over a pilot missile. It was the acid test. If the defense network couldn't get it, perhaps others would come over—perhaps not. It was all part of the cold war.

Miles away two missiles leaped from their ramps flashing skyward on flaming rockets. The gunnery officer waited a moment and then swore. "Missed, by damn! It looks like Ivan's got something new." He flipped a switch. "Reserve line, stand by," he said. "Bogey coming over. Course 0200."

"Got her," a voice came from the speaker of the command set. "All stations in range fire four—salvo!"

"My God, what's in that thing! Warn Stateside! Execute!"

"All stations Eastseaboard Outer Defense Area! Bogey coming over!"

"Red Alert, all areas!" a communications man said urgently into a microphone. "Ivan's got something this time! General evacuation plan Boston to Richmond Plan One! Execute!"

"Outer Perimeter Fire Pattern B!"

"Center! Emergency Priority! General, there's a bogey coming in. Eastseaboard sector. It's passed the outer lines, and nothing's touched it so far. It's the damndest thing you ever saw! Too fast for interception. Estimated target area Boston-Richmond. For evaluation—I"

"Sector perimeter on target, sir!"

"Fire twenty, Pattern C!"

All along the flight path of the bogey, missile launchers hurled their cargoes of death into the sky. A moving pattern formed in front of the plunging object that now was flaming brightly enough to be seen in the cold northern daylight. Missiles struck, detonated, and were absorbed into the ravaging flames around the object, but it came on with unabated speed, a hissing roaring mass of destruction!

"God! It's still coming in!" an anguished voice wailed. "I told them we needed nuclear warheads for close-in defense!"

More missiles swept aloft, but the bogey was now so low

that both human and electronic sensings were too slow. An instantaneous blast of searing heat flashed across the land in its wake, crisping anything flammable in its path. Hundreds of tiny fires broke out, most of which were quickly extinguished, but others burned violently. A gas refinery in Utica exploded. Other damage of a minor nature was done in Scranton and Wilkes-Barre. The reports were mixed with military orders and the flare of missiles and the crack of artillery hurling box barrages into the sky. But it was futile. The target was moving almost too fast to be seen, and by the time the missiles and projectiles reached intercept point the target was gone, drawing away from the fastest devices with almost contemptuous ease.

General French sat upright in his chair. The peaceful expression vanished from his face to be replaced by a hard intent look, as his eyes flicked from phones to TV screen. The series of tracking stations, broadcasting over wire, sent their images in to be edited and projected on the screens in French's room. Their observations appeared at frighteningly short intervals.

French stared at the flaring dot that swept across the screens. It could not be a missile, unless—his mind faltered at the thought—the Russians were farther advanced than anyone had expected. They might be at that—after all they had surprised the world with sputnik not too many years ago, and the West was forced to work like fiends to catch up.

"Target confirmed," one of the speakers announced with unearthly calm. "It's Washington!"

The speaker to the left of the screen broke into life. "This is Conelrad," it said. "This is not a test, repeat—*this is not a test!*" The voice faded as another station took over. "A transpolar missile is headed south along the eastern seaboard. Target Washington. Plan One. Evacuation time thirty seconds—"

Thirty seconds! French's mind recoiled. Washington was dead! You couldn't go anywhere in thirty seconds! His hand moved toward the red button. This was it!

The missile on the screen was brighter now. It flamed like a miniature sun, and the sound of its passage was that of a

million souls in torment! "It can't stand much more of that," French breathed. "It'll burn up!"

"New York Sector—bogey at twelve o'clock—high! God! Look at it!"

The glare of the thing filled the screen.

The blue phone rang. "Center," French said. He waited and then laid the phone down. The line was dead.

"Flash!" Conelrad said. "The enemy missile has struck south of New York. A tremendous flash was seen fifteen seconds ago by observers in civilian defense spotting nets . . . No sound of the explosion as yet . . . More information—triangulation of the explosion indicates that it has struck the nation's capitol! Our center of government has been destroyed!" There was a short silence broken by a faint voice "Oh, my God!—all those poor people!"

The red phone rang. French picked it up. "Center," he said.

The phone squawked at him.

"Your authority?" French queried dully. He paused and his face turned an angry red. "Just who do you think you are, Colonel? I'll take orders from the Chief—but no one else! Now get off that line! . . . Oh, I see. Then it's my responsibility? . . . All right I accept it—now leave me alone!" He put the phone gently back on the cradle. A fine beading of sweat dotted his forehead. This was the situation he had never let himself think would occur. The President was dead. The Joint Chiefs were dead. He was on his own until some sort of government could be formed.

Should he wait and let Ivan exploit his advantage, or should he strike? Oddly he wondered what his alter ego in Russia was doing at this moment. Was he proud of having struck this blow—or was he frightened. French smiled grimly. If he were in Ivan's shoes, he'd be scared to death! He shivered. For the first time in years he felt the full weight of the responsibility that was his.

The red phone rang again.

"Center—French here . . . Who's that? . . . Oh, yes, sir, Mr. Vice . . . er Mr. President! . . . Yes, sir, it's a terrible thing . . . What have I done? Well, nothing yet, sir. A single bogey like that doesn't feel right. I'm waiting for the follow-

up that'll confirm . . . Yes, sir, I know—but do *you* want to take the responsibility for destroying the world? What if it wasn't Ivan's? Have you thought of that? . . . Yes, sir, it's my judgment that we wait. . . . No, sir, I don't think so, if Ivan's back of this we'll have more coming, and if we do I'll fire. . . . No, sir, I will not take that responsibility. . . . Yes, I know Washington's destroyed, but we still have no proof of Ivan's guilt. Long-range radar has not reported any activity in Russia. . . . Sorry, sir, I can't see it that way—and you can't relieve me until 1600 hours . . . Yes, sir, I realize what I'm doing . . . Very well, sir, if that's the way you want it I'll resign at 1600 hours. Good-by.” French dropped the phone into its cradle and wiped his forehead. He had just thrown his career out of the window, but that was another thing that couldn't be helped. The President was hysterical now. Maybe he'd calm down later.

“Flash!” the radio said. “Radio Moscow denies that the missile which destroyed Washington was one of theirs. They insist that it is a capitalist trick to make them responsible for World War III. The Premier accuses the United States . . . hey! wait a minute! . . . accuses the United States of trying to foment war, but to show the good faith of the Soviet Union, he will open the country to UN inspection to prove once and for all that the Soviet does not and has not intended nuclear aggression. He proposes that a UN team investigate the wreckage of Washington to determine whether the destruction was actually caused by a missile. Hah! Just what in hell does he think caused it?”

French grinned thinly. Words like the last were seldom heard on the lips of commentators. The folks outside were pretty wrought up. There was hysteria in almost every word that had come into the office. But it hadn't moved him yet. His finger was still off the trigger. He picked up the white phone. “Get me Dew Line Headquarters,” he said. “Hello, Dew Line, this is French at Center. Any more bogeys? . . . No? . . . That's good. . . . No, we're still holding off. . . . Why? . . . Any fool would know why if he stopped to think!” He slammed the phone back into its cradle. Damn fools, howling for war! Just who did they think would win it? Sure, it would be easy to start things rolling. All he had

to do was push the button. He stared at it with fascinated eyes. Nearly three billion lives lay on that polished plastic surface, and he could snuff most of them out with one jab of a finger.

"Sir!" a voice broke from the speaker. "What's the word—are we in it yet?"

"Not yet, Jimmy."

"Thank God!" the voice sounded relieved. "Just hang on, sir. We know they're pressuring you, but they'll stop screaming for blood once they have time to think."

"I hope so," French said. He chuckled without humor. The personnel at Center knew what nuclear war would be like. Most of them had experience at Frenchman's Flat. They didn't want any part of it if it could be avoided. And neither did he.

The hours dragged by. The phones rang, and Conelrad kept reporting—giving advice and directions for evacuation of the cities. All the nation was stalled in the hugest traffic jam in history. Some of it couldn't help seeping in, even through the censorship. There was danger in too much of anything, and obviously the country was overmechanized. By now French was certain that Russia was innocent. If she wasn't, Ivañ would have struck in force by now. He wondered how his opposite number in Russia was taking it. Was the man crouched over his control board waiting for the cloud of capitalist missiles to appear over the horizon? Or was he, too, fingering a red button debating whether or not to strike before it was too late.

"Flash!" the radio said. "Radio Moscow offers immediate entry to any UN inspection team authorized by the General Assembly. The Presidium has met and announces that under no circumstances will Russia take any aggressive action. They repeat that the missile was not theirs, and suggest that it might have originated from some other nation desirous of fomenting war between the Great Powers . . . ah, nuts!"

"That's about as close to surrender as they dare come," French murmured softly. "They're scared green—but then who wouldn't be?" He looked at the local clock. He read

1410. Less than two hours to go before the time lock opened and unimaginative Jim Craig came through that door to take his place. If the President called with Craig in the seat, the executive orders would be obeyed. He picked up the white phone.

"Get me the Commanding General of the Second Army," he said. He waited a moment. "Hello, George, this is Al at Center. How you doing? Bad, huh? No, we're holding off . . . Now hold it, George. That's not what I called for. I don't need moral support. I want information. Have your radiac crews checked the Washington Area yet? . . . They haven't. Why not? Get them on the ball! Ivan keeps insisting that that bogey wasn't his and the facts seem to indicate he's telling the truth for once, but we're going to blast if he can't prove it! I want the dope on radioactivity in that area and I want it now! . . . If you don't want to issue an order—call for volunteers. . . . So they might get a lethal dose—so what? . . . Offer them a medal. There's always someone who'd walk into hell for the chance of getting a medal. Now get cracking! . . . Yes, that's an order."

The radio came on again. "First reports of the damage in Washington," it chattered. "A shielded Air Force reconnaissance plane has flown over the blast area, taking pictures and making an aerial survey of fall-out intensity. The Capitol is a shambles. Ground Zero was approximately in the center of Pennsylvania Avenue. There is a tremendous crater over half a mile wide, and around that for nearly two miles there is literally nothing! The Capitol is gone. Over ninety-eight per cent of the city is destroyed. Huge fires are raging in Alexandria and the outskirts. The Potomac bridges are down. The destruction is inconceivable. The landmarks of our—"

French grabbed the white phone. "Find out who the Air Force commander was who sent up that recon plane over Washington!" he barked. "I don't know who he is—but get him *now*!" He waited for three minutes. "So it was you, Willoughby! I thought it might be. This is French at Center. What did that recon find? . . . It did, hey? . . . Well now, isn't that simply wonderful! You stupid, publicity-crazy fool! What do you mean by withholding vital information? Do

you realize that I've been sitting here with my finger on the button ready to kill half the earth's population, while you've been flirting around with reporters? . . . Dammit! That's no excuse! You should be cashiered—and if I have any influence around here tomorrow, I'll see that you are. As it is, you're relieved as of now! . . . What do you mean I can't do that? . . . Read your regulations again, and then get out of that office and place yourself under arrest in quarters! Turn over your command to your executive officer! You utter driveling fool! . . . Aaagh!!” French snarled as he slammed the phone back.

It began ringing again immediately. “French here . . . Yes, George . . . You have? . . . You did? . . . It isn't? . . . I thought so. We've been barking up the wrong tree this time. It was an act of God! . . . Yes, I said an act of God! Remember that crater out in Arizona? Well, this is the same thing—a meteor! . . . Yes, Ivan's still quiet. Not a peep out of him. The Dew Line reports no activity.”

The blue phone began to ring. French looked at it. “O.K., George—apology accepted. I know how you feel.” He hung up and lifted the blue phone. “Yes, Mr. President,” he said. “Yes, sir. You've heard the news I suppose . . . You've had confirmation from Lick Observatory? . . . Yes, sir, I'll stay here if you wish . . . No, sir, I'm perfectly willing to act. It was just that this never did look right—and thank God that you understand astronomy, sir. . . . Of course I'll stay until the emergency is over, but you'll have to tell General Craig. . . . Who's Craig?—why he's my relief, sir.” French looked at the clock. “He comes on in twenty minutes. . . . Well, thank you, sir. I never thought that I'd get a commendation for not obeying orders.”

French sighed and hung up. Sense was beginning to percolate through the shock. People were beginning to think again. He sighed. This should teach a needed lesson. He made a mental note of it. If he had anything to say about the make-up of Center from now on—there'd be an astronomer on the staff, and a few more of them scattered out on the Dew Line and the outpost groups. It was virtually certain now that the Capitol was struck by a meteorite. There was no radioactivity. It had been an act of God—or at least

not an act of war. The destruction was terrible, but it could have been worse if either he or his alter ego in Russia had lost control and pushed the buttons. He thought idly that he'd like to meet the Ivan who ran their Center.

"The proposals of the Soviet government," the radio interrupted, "have been accepted by the UN. An inspection team is en route to Russia, and others will follow as quickly as possible. Meanwhile the UN has requested a cease-fire assurance from the United States, warning that the start of a nuclear war would be the end of everything." The announcer's voice held a note of grim humor. "So far, there has been no word from Washington concerning these proposals."

French chuckled. It might not be in the best taste, and it might be graveyard humor—but it was a healthy sign.

THE PRIZE OF PERIL

by Robert Sheckley

This may come as a bit of a letdown, after Emshwiller and Bone, but Robert Sheckley is neither a cover boy nor a professor of extraterrestrial medicine. He is a writer of science fantasy, and has applied himself with exceptional competence to that profession for the past ten years or so.

"The Prize of Peril" is a story that needed the professional touch. Satires about television have cluttered the pages of too many magazines for several years, and the topic has by now been handled with more unoriginal thinking, pedestrian prose, and all-round mismanagement than any other theme I know. But this one is neither second-rate nor secondhand; this is hot-off-the-griddle, emphatically first-rate Sheckley, and is, incidentally, the favorite story in this year's volume of the gentleman who edits Dell First Editions.

Raeder lifted his head cautiously above the window sill. He saw the fire escape, and below it a narrow alley. There was a weatherbeaten baby carriage in the alley, and three garbage cans. As he watched, a black-sleeved arm moved from behind the farthest can, with something shiny in its fist. Raeder ducked down. A bullet smashed through the window above his head and punctured the ceiling, showering him with plaster.

Now he knew about the alley. It was guarded, just like the door.

He lay at full length on the cracked linoleum, staring at the bullet hole in the ceiling, listening to the sounds outside the door. He was a tall man with bloodshot eyes and a two-day stubble. Grime and fatigue had etched lines into his face. Fear had touched his features, tightening a muscle here and twitching a nerve there. The results were startling. His face had character now, for it was reshaped by the expectation of death.

There was a gunman in the alley and two on the stairs. He was trapped. He was dead.

Sure, Raeder thought, he still moved and breathed; but that was only because of death's inefficiency. Death would take care of him in a few minutes. Death would poke holes in his face and body, artistically dab his clothes with blood, arrange his limbs in some grotesque position of the graveyard ballet . . . Raeder bit his lip sharply. He wanted to live. There had to be a way.

He rolled onto his stomach and surveyed the dingy cold-water apartment into which the killers had driven him. It was a perfect little one-room coffin. It had a door, which was watched, and a fire escape, which was watched. And it had a tiny windowless bathroom.

He crawled to the bathroom and stood up. There was a ragged hole in the ceiling, almost four inches wide. If he could enlarge it, crawl through into the apartment above . . .

He heard a muffled thud. The killers were impatient. They were beginning to break down the door.

He studied the hole in the ceiling. No use even considering it. He could never enlarge it in time.

They were smashing against the door, grunting each time they struck. Soon the lock would tear out, or the hinges would pull out of the rotting wood. The door would go down, and the two blank-faced men would enter, dusting off their jackets. . . .

But surely someone would help him! He took the tiny television set from his pocket. The picture was blurred, and he didn't bother to adjust it. The audio was clear and precise.

He listened to the well-modulated voice of Mike Terry addressing his vast audience.

" . . . terrible spot," Terry was saying. *"Yes, folks, Jim Raeder is in a truly terrible predicament. He had been hiding, you'll remember, in a third-rate Broadway hotel under an assumed name. It seemed safe enough. But the bellhop recognized him, and gave that information to the Thompson gang."*

The door creaked under repeated blows. Raeder clutched the little television set and listened.

"Jim Raeder just managed to escape from the hotel! Closely pursued, he entered a brownstone at one fifty-six West End Avenue. His intention was to go over the roofs. And it might have worked, folks, it just might have worked. But the roof door was locked. It looked like the end. . . . But Raeder found that apartment seven was unoccupied and unlocked. He entered . . ."

Terry paused for emphasis, then cried: "*—and now he's trapped there, trapped like a rat in a cage! The Thompson gang is breaking down the door! The fire escape is guarded! Our camera crew, situated in a near-by building, is giving you a closeup now. Look, folks, just look! Is there no hope for Jim Raeder?*"

Is there no hope? Raeder silently echoed, perspiration pouring from him as he stood in the dark, stifling little bathroom, listening to the steady thud against the door.

"*Wait a minute!*" Mike Terry cried. "*Hang on, Jim Raeder, hang on a little longer. Perhaps there is hope! I have an urgent call from one of our viewers, a call on the Good Samaritan Line! Here's someone who thinks he can help you, Jim. Are you listening, Jim Raeder?*"

Raeder waited, and heard the hinges tearing out of rotten wood.

"*Go right ahead, sir,*" said Mike Terry. "*What is your name, sir?*"

"*Er—Felix Bartholemow.*"

"*Don't be nervous, Mr. Bartholemow. Go right ahead.*"

"*Well, OK. Mr. Raeder,*" said an old man's shaking voice, "*I used to live at one five six West End Avenue. Same apartment you're trapped in, Mr. Raeder—fact! Look, that bathroom has got a window, Mr. Raeder. It's been painted over, but it has got a—*"

Raeder pushed the television set into his pocket. He located the outlines of the window and kicked. Glass shattered, and daylight poured startlingly in. He cleared the jagged sill and quickly peered down.

Below was a long drop to a concrete courtyard.

The hinges tore free. He heard the door opening. Quickly Raeder climbed through the window, hung by his fingertips for a moment, and dropped.

The shock was stunning. Groggily he stood up. A face appeared at the bathroom window.

"Tough luck," said the man, leaning out and taking careful aim with a snub-nosed .38.

At that moment a smoke bomb exploded inside the bathroom.

The killer's shot went wide. He turned, cursing. More smoke bombs burst in the courtyard, obscuring Raeder's figure.

He could hear Mike Terry's frenzied voice over the TV set in his pocket. *"Now run for it!"* Terry was screaming. *"Run, Jim Raeder, run for your life. Run now, while the killers' eyes are filled with smoke. And thank Good Samaritan Sarah Winters, of three four one two Edgar Street, Brockton, Mass., for donating five smoke bombs and employing the services of a man to throw them!"*

In a quieter voice, Terry continued: *"You've saved a man's life today, Mrs. Winters. Would you tell our audience how it—"*

Raeder wasn't able to hear any more. He was running through the smoke-filled courtyard, past clotheslines, into the open street.

He walked down 63d Street, slouching to minimize his height, staggering slightly from exertion, dizzy from lack of food and sleep.

"Hey you!"

Raeder turned. A middle-aged woman was sitting on the steps of a brownstone, frowning at him.

"You're Raeder, aren't you? The one they're trying to kill?"

Raeder started to walk away.

"Come inside here, Raeder," the woman said.

Perhaps it was a trap. But Raeder knew that he had to depend upon the generosity and goodheartedness of the people. He was their representative, a projection of themselves, an average guy in trouble. Without them, he was lost. With them, nothing could harm him.

Trust in the people, Mike Terry had told him. They'll never let you down.

He followed the woman into her parlor. She told him to sit down and left the room, returning almost immediately with a plate of stew. She stood watching him while he ate, as one would watch an ape in the zoo eat peanuts.

Two children came out of the kitchen and stared at him. Three overalled men came out of the bedroom and focused a television camera on him. There was a big television set in the parlor. As he gulped his food, Raeder watched the image of Mike Terry, and listened to the man's strong, sincere, worried voice.

"*There he is, folks,*" Terry was saying. "*There's Jim Raeder now, eating his first square meal in two days. Our camera crews have really been working to cover this for you! Thanks, boys. . . . Folks, Jim Raeder has been given a brief sanctuary by Mrs. Velma O'Dell, of three forty-three Sixty-Third Street. Thank you, Good Samaritan O'Dell! It's really wonderful how people from all walks of life have taken Jim Raeder to their hearts!*"

"You better hurry," Mrs. O'Dell said.

"Yes, ma'am," Raeder said.

"I don't want no gunplay in my apartment."

"I'm almost finished, ma'am."

One of the children asked, "Aren't they going to kill him?"

"Shut up," said Mrs. O'Dell.

"Yes, Jim," chanted Mike Terry, "*you'd better hurry. Your killers aren't far behind. They aren't stupid men, Jim. Vicious, warped, insane—yes! But not stupid. They're following a trail of blood—blood from your torn hand, Jim!*"

Raeder hadn't realized until now that he'd cut his hand on the window sill.

"Here, I'll bandage that," Mrs. O'Dell said. Raeder stood up and let her bandage his hand. Then she gave him a brown jacket and a gray slouch hat.

"My husband's stuff," she said.

"*He has a disguise, folks!*" Mike Terry cried delightedly. "*This is something new! A disguise! With seven hours to go until he's safe!*"

"Now get out of here," Mrs. O'Dell said.

"I'm going, ma'am," Raeder said. "Thanks."

"I think you're stupid," she said. "I think you're stupid to be involved in this."

"Yes, ma'am."

"It just isn't worth it."

Raeder thanked her and left. He walked to Broadway, caught a subway to 59th Street, then an uptown local to 86th. There he bought a newspaper and changed for the Manhasset through-express.

He glanced at his watch. He had six and a half hours to go.

The subway roared under Manhattan. Raeder dozed, his bandaged hand concealed under the newspaper, the hat pulled over his face. Had he been recognized yet? Had he shaken the Thompson gang? Or was someone telephoning them now?

Dreamily he wondered if he had escaped death. Or was he still a cleverly animated corpse, moving around because of death's inefficiency? (My dear, death is so *laggard* these days! Jim Raeder walked about for hours after he died, and actually answered people's *questions* before he could be decently buried!)

Raeder's eyes snapped open. He had dreamed something . . . unpleasant. He couldn't remember what.

He closed his eyes again and remembered, with mild astonishment, a time when he had been in no trouble.

That was two years ago. He had been a big, pleasant young man working as a truck driver's helper. He had no talents. He was too modest to have dreams.

The tight-faced little truck driver had the dreams for him. "Why not try for a television show, Jim? I would if I had your looks. They like nice average guys with nothing much on the ball. As contestants. Everybody likes guys like that. Why not look into it?"

So he had looked into it. The owner of the local television store had explained it further.

"You see, Jim, the public is sick of highly trained athletes with their trick reflexes and their professional courage. Who can feel for guys like that? Who can identify? People want to watch exciting things, sure. But not when

some joker is making it his business for fifty thousand a year. That's why organized sports are in a slump. That's why the thrill shows are booming."

"I see," said Raeder.

"Six years ago, Jim, Congress passed the Voluntary Suicide Act. Those old senators talked a lot about free will and self-determinism at the time. But that's all crap. You know what the Act really means? It means that amateurs can risk their lives for the big loot, not just professionals. In the old days you had to be a professional boxer or footballer or hockey player if you wanted your brains beaten out legally for money. But now that opportunity is open to ordinary people like you, Jim."

"I see," Raeder said again.

"It's a marvelous opportunity. Take you. You're no better than anyone, Jim. Anything you can do, anyone can do. You're *average*. I think the thrill shows would go for you."

Raeder permitted himself to dream. Television shows looked like a sure road to riches for a pleasant young fellow with no particular talent or training. He wrote a letter to a show called *Hazard* and enclosed a photograph of himself.

Hazard was interested in him. The JBC network investigated, and found that he was average enough to satisfy the warriest viewer. His parentage and affiliations were checked. At last he was summoned to New York, and interviewed by Mr. Mouliau.

Mouliau was dark and intense, and chewed gum as he talked. "You'll do," he snapped. "But not for *Hazard*. You'll appear on *Spills*. It's a half-hour daytime show on Channel Three."

"Gee," said Raeder.

"Don't thank me. There's a thousand dollars if you win or place second, and a consolation prize of a hundred dollars if you lose. But that's not important."

"No, sir."

"*Spills* is a *little* show. The JBC network uses it as a testing ground. First- and second-place winners on *Spills* move on to *Emergency*. The prizes are much bigger on *Emergency*."

"I know they are, sir."

"And if you do well on *Emergency* there are the first-class thrill shows, like *Hazard* and *Underwater Perils*, with their nationwide coverage and enormous prizes. And then comes the really big time. How far you go is up to you."

"I'll do my best, sir," Raeder said.

Moulian stopped chewing gum for a moment and said, almost reverently, "You can do it, Jim. Just remember. You're *the people*, and *the people* can do anything."

The way he said it made Raeder feel momentarily sorry for Mr. Moulian, who was dark and frizzy-haired and pop-eyed, and was obviously not *the people*.

They shook hands. Then Raeder signed a paper absolving the JBC of all responsibility should he lose his life, limbs or reason during the contest. And he signed another paper exercising his rights under the Voluntary Suicide Act. The law required this, and it was a mere formality.

In three weeks, he appeared on *Spills*.

The program followed the classic form of the automobile race. Untrained drivers climbed into powerful American and European competition cars and raced over a murderous twenty-mile course. Raeder was shaking with fear as he slid his big Maserati into the wrong gear and took off.

The race was a screaming, tire-burning nightmare. Raeder stayed back, letting the early leaders smash themselves up on the counter-banked hairpin turns. He crept into third place when a Jaguar in front of him swerved against an Alfa-Romeo, and the two cars roared into a plowed field. Raeder gunned for second place on the last three miles, but couldn't find passing room. An S-curve almost took him, but he fought the car back on the road, still holding third. Then the lead driver broke a crankshaft in the final fifty yards, and Jim ended in second place.

He was now a thousand dollars ahead. He received four fan letters, and a lady in Oshkosh sent him a pair of argyles. He was invited to appear on *Emergency*.

Unlike the others, *Emergency* was not a competition-type program. It stressed individual initiative. For the show, Raeder was knocked out with a non-habit-forming narcotic. He

awoke in the cockpit of a small airplane, cruising on autopilot at ten thousand feet. His fuel gauge showed nearly empty. He had no parachute. He was supposed to land the plane.

Of course, he had never flown before.

He experimented gingerly with the controls, remembering that last week's participant had recovered consciousness in a submarine, had opened the wrong valve, and had drowned.

Thousands of viewers watched spellbound as this average man, a man just like themselves, struggled with the situation just as they would do. Jim Raeder was *them*. Anything he could do, they could do. He was representative of *the people*.

Raeder managed to bring the ship down in some semblance of a landing. He flipped over a few times, but his seat belt held. And the engine, contrary to expectation, did not burst into flames.

He staggered out with two broken ribs, three thousand dollars, and a chance, when he healed, to appear on *Torero*.

At last, a first-class thrill show! *Torero* paid ten thousand dollars. All you had to do was kill a black Miura bull with a sword, just like a real trained matador.

The fight was held in Madrid, since bullfighting was still illegal in the United States. It was nationally televised.

Raeder had a good cuadrilla. They liked the big, slow-moving American. The picadors really leaned into their lances, trying to slow the bull for him. The banderilleros tried to run the beast off his feet before driving in their banderillas. And the second matador, a mournful man from Algeciras, almost broke the bull's neck with fancy cape work.

But when all was said and done it was Jim Raeder on the sand, a red muleta clumsily gripped in his left hand, a sword in his right, facing a ton of black, blood-streaked, wide-horned bull.

Someone was shouting, "Try for the lung, *hombre*. Don't be a hero, stick him in the lung." But Jim only knew what the technical adviser in New York had told him: Aim with the sword and go in over the horns.

Over he went. The sword bounced off bone, and the bull tossed him over its back. He stood up, miraculously ungouged, took another sword and went over the horns again with his eyes closed. The god who protects children and fools must have been watching, for the sword slid in like a needle through butter, and the bull looked startled, stared at him unbelievably, and dropped like a deflated balloon.

They paid him ten thousand dollars, and his broken collar bone healed in practically no time. He received twenty-three fan letters, including a passionate invitation from a girl in Atlantic City, which he ignored. And they asked him if he wanted to appear on another show.

He had lost some of his innocence. He was now fully aware that he had been almost killed for pocket money. The big loot lay ahead. Now he wanted to be almost killed for something worthwhile.

So he appeared on *Underwater Perils*, sponsored by Fairlady's Soap. In face mask, respirator, weighted belt, flippers and knife, he slipped into the warm waters of the Caribbean with four other contestants, followed by a cage-protected camera crew. The idea was to locate and bring up a treasure which the sponsor had hidden there.

Mask diving isn't especially hazardous. But the sponsor had added some frills for public interest. The area was sown with giant clams, moray eels, sharks of several species, giant octopuses, poison coral, and other dangers of the deep.

It was a stirring contest. A man from Florida found the treasure in a deep crevice, but a moray eel found him. Another diver took the treasure, and a shark took him. The brilliant blue-green water became cloudy with blood, which photographed well on color TV. The treasure slipped to the bottom and Raeder plunged after it, popping an eardrum in the process. He plucked it from the coral, jettisoned his weighted belt and made for the surface. Thirty feet from the top he had to fight another diver for the treasure.

They feinted back and forth with their knives. The man struck, slashing Raeder across the chest. But Raeder, with the self-possession of an old contestant, dropped his knife and tore the man's respirator out of his mouth.

That did it. Raeder surfaced, and presented the treasure

at the stand-by boat. It turned out to be a package of Fair-lady's Soap—"The Greatest Treasure of All."

That netted him twenty-two thousand dollars in cash and prizes, and three hundred and eight fan letters, and an interesting proposition from a girl in Macon, which he seriously considered. He received free hospitalization for his knife slash and burst eardrum, and injections for coral infection.

But best of all, he was invited to appear on the biggest of the thrill shows, *The Prize of Peril*.

And that was when the real trouble began. . . .

The subway came to a stop, jolting him out of his reverie. Raeder pushed back his hat and observed, across the aisle, a man staring at him and whispering to a stout woman. Had they recognized him?

He stood up as soon as the doors opened, and glanced at his watch. He had five hours to go.

At the Manhasset station he stepped into a taxi and told the driver to take him to New Salem.

"New Salem?" the driver asked, looking at him in the rear vision mirror.

"That's right."

The driver snapped on his radio. "Fare to New Salem. Yep, that's right. *New Salem*."

They drove off. Raeder frowned, wondering if it had been a signal. It was perfectly usual for taxi drivers to report to their dispatchers, of course. But something about the man's voice

"Let me off here," Raeder said.

He paid the driver and began walking down a narrow country road that curved through sparse woods. The trees were too small and too widely separated for shelter. Raeder walked on, looking for a place to hide.

There was a heavy truck approaching. He kept on walking, pulling his hat low on his forehead. But as the truck drew near, he heard a voice from the television set in his pocket. It cried, "*Watch out!*"

He flung himself into the ditch. The truck careened past, narrowly missing him, and screeched to a stop. The driver

was shouting, "There he goes! Shoot, Harry, shoot!"

Bullets clipped leaves from the trees as Raeder sprinted into the woods.

"*It's happened again!*" Mike Terry was saying, his voice high-pitched with excitement "*I'm afraid Jim Raeder let himself be lulled into a false sense of security. You can't do that, Jim! Not with your life at stake! Not with killers pursuing you! Be careful, Jim, you still have four and a half hours to go!*"

The driver was saying, "Claude, Harry, go around with the truck. We got him boxed."

"*They've got you boxed, Jim Raeder!*" Mike Terry cried. "*But they haven't got you yet! And you can thank Good Samaritan Susy Peters of twelve Elm Street, South Orange, New Jersey, for that warning shout just when the truck was bearing down on you. We'll have little Susy on stage in just a moment. . . . Look, folks, our studio helicopter has arrived on the scene. Now you can see Jim Raeder running, and the killers pursuing, surrounding him . . .*"

Raeder ran through a hundred yards of woods and found himself on a concrete highway, with open woods beyond. One of the killers was trotting through the woods behind him. The truck had driven to a connecting road, and was now a mile away, coming toward him.

A car was approaching from the other direction Raeder ran into the highway, waving frantically. The car came to a stop.

"Hurry!" cried the blond young woman driving it

Raeder dived in. The woman made a U-turn on the highway. A bullet smashed through the windshield. She stamped on the accelerator, almost running down the lone killer who stood in the way.

The car surged away before the truck was within firing range.

Raeder leaned back and shut his eyes tightly. The woman concentrated on her driving, watching for the truck in her rear-vision mirror.

"*It's happened again!*" cried Mike Terry, his voice ecstatic. "*Jim Raeder has been plucked again from the jaws of death, thanks to Good Samaritan Janice Morrow of four*

three three Lexington Avenue, New York City. Did you ever see anything like it, folks? The way Miss Morrow drove through a fusillade of bullets and plucked Jim Raeder from the mouth of doom! Later we'll interview Miss Morrow and get her reactions. Now, while Jim Raeder speeds away—perhaps to safety, perhaps to further peril—we'll have a short announcement from our sponsor. Don't go away! Jim's got four hours and ten minutes until he's safe. Anything can happen!"

"OK," the girl said. "We're off the air now. Raeder, what in the hell is the matter with you?"

"Eh?" Raeder asked. The girl was in her early twenties. She looked efficient, attractive, untouchable. Raeder noticed that she had good features, a trim figure. And he noticed that she seemed angry.

"Miss," he said, "I don't know how to thank you for—"

"Talk straight," Janice Morrow said. "I'm no Good Samaritan. I'm employed by the JBC network."

"So the program had me rescued!"

"Cleverly reasoned," she said.

"But why?"

"Look, this is an expensive show, Raeder. We have to turn in a good performance. If our rating slips, we'll all be in the street selling candy apples. And you aren't co-operating."

"What? Why?"

"Because you're terrible," the girl said bitterly. "You're a flop, a fiasco. Are you trying to commit suicide? Haven't you learned *anything* about survival?"

"I'm doing the best I can."

"The Thompsons could have had you a dozen times by now. We told them to take it easy, stretch it out. But it's like shooting a clay pigeon six feet tall. The Thompsons are co-operating, but they can only fake so far. If I hadn't come along, they'd have had to kill you—air-time or not."

Raeder stared at her, wondering how such a pretty girl could talk that way. She glanced at him, then quickly looked back to the road.

"Don't give me that look!" she said. "You chose to risk your life for money, buster. And plenty of money! You

knew the score. Don't act like some innocent little grocer who finds the nasty hoods are after him. That's a different plot."

"I know," Raeder said.

"If you can't live well, at least try to die well."

"You don't mean that," Raeder said.

"Don't be too sure. . . . You've got three hours and forty minutes until the end of the show. If you can stay alive, fine. The boodle's yours. But if you can't, at least try to give them a run for the money."

Raeder nodded, staring intently at her.

"In a few moments we're back on the air. I develop engine trouble, let you off. The Thompsons go all out now. They kill you when and if they can, as soon as they can. Understand?"

"Yes," Raeder said. "If I make it, can I see you some time?"

She bit her lip angrily. "Are you trying to kid me?"

"No. I'd like to see you again. May I?"

She looked at him curiously. "I don't know. Forget it. We're almost on. I think your best bet is the woods to the right. Ready?"

"Yes. Where can I get in touch with you? Afterward, I mean."

"Oh, Raeder, you aren't paying attention. Go through the woods until you find a washed-out ravine. It isn't much, but it'll give you some cover."

"Where can I get in touch with you?" Raeder asked again.

"I'm in the Manhattan telephone book." She stopped the car. "OK, Raeder, start running."

He opened the door.

"Wait," she leaned over and kissed him on the lips.

"Good luck, you idiot. Call me if you make it."

And then he was on foot, running into the woods

He ran through birch and pine, past an occasional split-level house with staring faces at the big picture window. Some occupant of those houses must have called the gang, for they were close behind him when he reached the washed-

out little ravine. Those quiet, mannerly, law-abiding people didn't want him to escape, Raeder thought sadly. They wanted to see a killing. Or perhaps they wanted to see him *narrowly escape* a killing.

It came to the same thing, really.

He entered the ravine, burrowed into the thick underbrush and lay still. The Thompsons appeared on both ridges, moving slowly, watching for any movement. Raeder held his breath as they came parallel to him.

He heard the quick explosion of a revolver. But the killer had only shot a squirrel. It squirmed for a moment, then lay still.

Lying in the underbrush, Raeder heard the studio helicopter overhead. He wondered if any cameras were focused on him. It was possible. And if someone were watching, perhaps some Good Samaritan would help.

So looking upward, toward the helicopter, Raeder arranged his face in a reverent expression, clasped his hands and prayed. He prayed silently, for the audience didn't like religious ostentation. But his lips moved. That was every man's privilege.

And a real prayer was on his lips. Once, a lip-reader in the audience had detected a fugitive *pretending* to pray, but actually just reciting multiplication tables. No help for that man!

Raeder finished his prayer. Glancing at his watch, he saw that he had nearly two hours to go.

And he didn't want to die! It wasn't worth it, no matter how much they paid! He must have been crazy, absolutely insane to agree to such a thing. . . .

But he knew that wasn't true. And he remembered just how sane he had been.

One week ago he had been on the *Prize of Peril* stage, blinking in the spotlight, and Mike Terry had shaken his hand.

"Now, Mr. Raeder," Terry had said solemnly, "do you understand the rules of the game you are about to play?"

Raeder nodded.

"If you accept, Jim Raeder, you will be a *hunted man* for

a week. *Killers* will follow you, Jim. *Trained* killers, men wanted by the law for other crimes, granted immunity for this single killing under the Voluntary Suicide Act. They will be trying to kill *you*, Jim. Do you understand?"

"I understand," Raeder said. He also understood the two hundred thousand dollars he would receive if he could live out the week.

"I ask you again, Jim Raeder. We force no man to play for stakes of death."

"I want to play," Raeder said.

Mike Terry turned to the audience. "Ladies and gentlemen, I have here a copy of an exhaustive psychological test which an impartial psychological testing firm made on Jim Raeder at our request. Copies will be sent to anyone who desires them for twenty-five cents to cover the cost of mailing. The test shows that Jim Raeder is sane, well-balanced, and fully responsible in every way." He turned to Raeder. "Do you still want to enter the contest, Jim?"

"Yes, I do."

"Very well!" cried Mike Terry. "Jim Raeder, meet your would-be killers!"

The Thompson gang moved on stage, booed by the audience.

"Look at them, folks," said Mike Terry, with undisguised contempt. "Just look at them! Antisocial, thoroughly vicious, completely amoral. These men have no code but the criminal's warped code, no honor but the honor of the cowardly hired killer. They are doomed men, doomed by our society which will not sanction their activities for long, fated to an early and unglamorous death."

The audience shouted enthusiastically.

"What have you to say, Claude Thompson?" Terry asked.

Claude, the spokesman of the Thompsons, stepped up to the microphone. He was a thin, clean-shaven man, conservatively dressed.

"I figure," Claude Thompson said hoarsely, "I figure we're no worse than anybody. I mean, like soldiers in a war, *they* kill. And look at the graft in government, and the unions. Everybody's got their graft."

That was Thompson's tenuous code. But how quickly,

with what precision, Mike Terry destroyed the killer's rationalizations! Terry's questions pierced straight to the filthy soul of the man.

At the end of the interview Claude Thompson was perspiring, mopping his face with a silk handkerchief and casting quick glances at his men.

Mike Terry put a hand on Raeder's shoulder. "Here is the man who has agreed to become your victim—if you can catch him."

"We'll catch him," Thompson said, his confidence returning.

"Don't be too sure," said Terry. "Jim Raeder has fought wild bulls—now he battles jackals. He's an average man. He's *the people*—who mean ultimate doom to you and your kind."

"We'll get him," Thompson said.

"And one thing more," Terry said, very softly. "Jim Raeder does not stand alone. The folks of America are for him. Good Samaritans from all corners of our great nation stand ready to assist him. Unarmed, defenseless, Jim Raeder can count on the aid and goodheartedness of *the people*, whose representative he is. So don't be too sure, Claude Thompson! The average men are for Jim Raeder—and there are a lot of average men!"

Raeder thought about it, lying motionless in the underbrush. Yes, *the people* had helped him. But they had helped the killers, too.

A tremor ran through him. He had chosen, he reminded himself. He alone was responsible. The psychological test had proved that.

And yet, how responsible were the psychologists who had given him the test? How responsible was Mike Terry for offering a poor man so much money? Society had woven the noose and put it around his neck, and he was hanging himself with it, and calling it free will.

Whose fault?

"Aha!" someone cried.

Raeder looked up and saw a portly man standing near

him. The man wore a loud tweed jacket. He had binoculars around his neck, and a cane in his hand.

"Mister," Raeder whispered, "please don't tell—"

"Hi!" shouted the portly man, pointing at Raeder with his cane. "Here he is!"

A madman, thought Raeder. The damned fool must think he's playing Hare and Hounds.

"Right over here!" the man screamed.

Cursing, Raeder sprang to his feet and began running. He came out of the ravine and saw a white building in the distance. He turned toward it. Behind him he could still hear the man.

"That way, over there. Look, you fools, can't you see him yet?"

The killers were shooting again. Raeder ran, stumbling over uneven ground, past three children playing in a tree house.

"Here he is!" the children screamed. "Here he is!"

Raeder groaned and ran on. He reached the steps of the building, and saw that it was a church.

As he opened the door, a bullet struck him behind the right kneecap.

He fell, and crawled inside the church.

The television set in his pocket was saying, "*What a finish, folks, what a finish! Raeder's been hit! He's been hit, folks, he's crawling now, he's in pain, but he hasn't given up! Not Jim Raeder!*"

Raeder lay in the aisle near the altar. He could hear a child's eager voice saying, "He went in there, Mr. Thompson. Hurry, you can still catch him!"

Wasn't a church considered a sanctuary? Raeder wondered.

Then the door was flung open, and Raeder realized that the custom was no longer observed. He gathered himself together and crawled past the altar, out the back door of the church.

He was in an old graveyard. He crawled past crosses and stars, past slabs of marble and granite, past stone tombs and rude wooden markers. A bullet exploded on a tomb-

stone near his head, showering him with fragments. He crawled to the edge of an open grave.

They had received him, he thought. All of those nice average normal people. Hadn't they said he was their representative? Hadn't they sworn to protect their own? But no, they loathed him. Why hadn't he seen it? Their hero was the cold, blank-eyed gunman, Thompson, Capone, Billy the Kid, Young Lochinvar, El Cid, Cuchulain, the man without human hopes or fears. They worshiped him, that dead, implacable, robot gunman, and lusted to feel his foot in their face.

Raeder tried to move, and slid helplessly into the open grave.

He lay on his back, looking at the blue sky. Presently a black silhouette loomed above him, blotting out the sky. Metal twinkled. The silhouette slowly took aim.

And Raeder gave up all hope forever. "WAIT, THOMPSON!" roared the amplified voice of Mike Terry.

The revolver wavered.

"It is one second past five o'clock! The week is up! JIM RAEDER HAS WON!"

There was a pandemonium of cheering from the studio audience.

The Thompson gang, gathered around the grave, looked sullen.

"He's won, friends, he's won!" Mike Terry cried. *"Look, look on your screen! The police have arrived, they're taking the Thompsons away from their victim—the victim they could not kill. And all this is thanks to you, Good Samaritans of America. Look, folks, tender hands are lifting Jim Raeder from the open grave that was his final refuge. Good Samaritan Janice Morrow is there. Could this be the beginning of a romance? Jim seems to have fainted, friends, they're giving him a stimulant. He's won two hundred thousand dollars! Now we'll have a few words from Jim Raeder!"*

There was a short silence.

"That's odd," said Mike Terry. *"Folks, I'm afraid we can't hear from Jim just now. The doctors are examining him. Just one moment . . ."*

There was a silence. Mike Terry wiped his forehead and smiled.

"It's the strain, folks, the terrible strain. The doctor tells me . . . Well, folks, Jim Raeder is temporarily not himself. But it's only temporary! JBC is hiring the best psychiatrists and psychoanalysts in the country. We're going to do everything humanly possible for this gallant boy. And entirely at our own expense."

Mike Terry glanced at the studio clock. *"Well, it's about time to sign off, folks. Watch for the announcement of our next great thrill show. And don't worry, I'm sure that very soon we'll have Jim Raeder back with us."*

Mike Terry smiled, and winked at the audience. *"He's bound to get well, friends. After all, we're all pulling for him!"*

HICKORY, DICKORY, KEROUAC

by Richard Gehman

The most frequent focus of speculation in s-f these days is on the cultural potential of humanity. One story may explore uncharted territory deep in the darkest interior of man; another may try to trace the tangled relationships between men and the world around them; a third might be a sort of aerial-photo view of the environment itself.

Richard Gehman is one of America's most prolific magazine writers, and is an inquisitive and earnest student of our mores, including our fads in jazz and literature.

This story was first published under the by-line, *Martin Scott*. The name was new to me. I queried editor Ray Russell at *Playboy*, who wrote to tell me the author's identity, and also said, "It certainly is an extremely clever piece, but I must admit I don't see how the satire fits into your book."

This shook me, because Russell is a type that digs s-f, mostly, and if this is not science fiction, it is what I mean by s-f, and—like, man, I mean, it is the greatest. . . .

It was a season of great restlessness and change for mice everywhere, a stirring time, a time of moods and urges and moves. The mouse felt it; his whiskers trembled in anticipation. One night there was a party in a stall, and an old badger came. He sat there drinking red wine and aspirin gravely, staring at a young and excitable squirrel who had been on cashews for months.

"It's the *time*, man!" the squirrel kept saying to the badger, but the mouse knew the message was for him. It had to be for him; the badger had fallen asleep after his third Sneaky Pete. That was the badger's way of rebellion. No squirrel could bug him.

The mouse got the message. He was quite possibly the hippest mouse that ever crept. He dug. He dug everything—he dug with his sharp little eyes, he dug with his pointy

little nose, he dug with his little claws (under each of which he kept a bit of dirt at all times, in case he might be invited to the Actors' Studio). The mouse dug the gray mice that lived in the universe that was his house, he dug the brown mice that were padded down in the vast unreachable reaches of the fields, and he dug the mice-colored mice that lived nowhere but stayed ever on the road. He even dug rats. Oh, how he dug; he dug the whole world, and he dug his hole-world. He was with it, he was of it, he was *in*.

This mouse was a *cat*.

He was well-known, too. He had eaten some pages of verse in some tiny magazines—*Trap*, *Silo Review* and *Barley*—and they had heard of him in San Francisco, where there was a small but pulsating and mysterious mouse revival swinging. But the season of restlessness caught him and he was hung, and although he had finished chewing three pages of a novel, he said to his mother, "Dad, I got to go."

There was reason enough: nothing charged him. He'd been on *pot*. Nothing. He'd gone on *pot* again; still nothing. He'd then gone on *pan*, *kettle*, *roaster*, *colander*, *soup spoon*; he'd tried everything in the kitchen cabinet. No kicks.

The word was out—he'd seen it in the squirrel's eyes that night at the party. The hipsters had a new kick. *Go on clock*, the word came. *Man, get with the clock-way; man, it's time; make it, man, it's timeless*.

The mouse rushed first to the First National Corn Crib, where all the squares kept their hoards. He started to spit—but he dug it too much, there was too much love in him for squares and everybody else, they were all Zenned up like he was, and he could not do it. He changed his mind, then changed it again. He rushed on. *Man*, this was living! He rushed over to a haystack where a beetle had a pad and gnawed anarchist poetry. He seized six of the beetle's legs and shook them violently. The beetle opened three of his four eyes and regarded the mouse with utter serenity. He was stoned, but he had so many eyes he could be stoned and still see *everything*.

"Come on," the mouse cried.

The beetle said nothing. That was what was so great about him, the mouse knew; he dug and he never spoke, like the crazy old mixed-up Zenners.

It was time to go again; time to go on time. The mouse ran and ran and ran and ran and finally he was there, at the clock. There it stood, wild as a skyscraper, tall and proud and like all America with a moon-face above it, waving its hands inscrutably and passively, cool as you please. The mouse wished he had a chick to dig it with him but knew that was childish; he was *himself*, he was with, in, of and *it*. The realization made his tail twitch. His ears rattled. Then the music came, long and mysterious, like some great old song chanted all the way from Tibet:

Hickory, dickory . . .*

It was the moment of truth: reds and greens and blues crowded in and permeated his little red eyes, he broke out in a cold sweat, he broke in out of a hot sweat.

Dock!

That was it. He ran up, he ran down.

Nothing happened.

Hickory, dickory, dock! the unearthly music came again.

"I dig!" the mouse screamed, and ran up and down again.

"I'm *on the clock*, Dad!" he cried to no one in particular. Breathless, he shouted it again. A spider, observing him icily from a corner, shrugged and wondered what the younger generation was coming to.

The mouse glanced at the spider. That second was when he knew the truth. Pot was no good, pan was no good, clock was just as bad. There was no escaping it. In the final analysis, he had to look inward. He walked home slowly and chewed up the rest of his novel. Today he is rich, a trustee of the First National Corn Crib, and is thinking of eating another book as soon as he can find the time away from his job. The badger is dead, the beetle has turned chiropractor, and only God digs. *Hickory, dickory, dock.*

THE YELLOW PILL

by Rog Phillips

"The best laid schemes o' mice and men," that Scotsman said, "gang aft a-gley." Which, in American, means: man or mouse, one can be just as crazy mixed-up as the other.

The late Robert Lindner, in his fascinating *The Fifty-Minute Hour*, wrote about a patient whose fantasy-world took the form of a space-travel story so credibly constructed that the psychiatrist himself kept drifting into near-acceptance of the reality of the alien planet. Now Mr. Phillips asks: How does the doctor know—for sure—who's crazy?

Dr. Cedric Elton slipped into his office by the back entrance, shucked off his topcoat and hid it in the small, narrow-doored closet, then picked up the neatly piled patient cards his receptionist Helena Fitzroy had placed on the corner of his desk. There were only four, but there could have been a hundred if he accepted everyone who asked to be his patient, because his successes had more than once been spectacular and his reputation as a psychiatrist had become so great because of this that his name had become synonymous with psychiatry in the public mind.

His eyes flicked over the top card. He frowned, then went to the small square of one-way glass in the reception-room door and looked through it. There were four police officers and a man in a strait jacket.

The card said the man's name was Gerald Bocek, and that he had shot and killed five people in a supermarket, and had killed one officer and wounded two others before being captured.

Except for the strait jacket, Gerald Bocek did not have the appearance of being dangerous. He was about twenty-five, with brown hair and blue eyes. There were faint wrinkles of habitual good nature about his eyes. Right now

he was smiling, relaxed, and idly watching Helena, who was pretending to study various cards in her desk file but was obviously conscious of her audience.

Cedric returned to his desk and sat down. The card for Jerry Bocek said more about the killings. When captured, Bocek insisted that the people he had killed were not people at all, but blue-scaled Venusian lizards who had boarded his spaceship, and that he had only been defending himself.

Dr. Cedric Elton shook his head in disapproval. Fantasy fiction was all right in its place, but too many people took it seriously. Of course, it was not the fault of the fiction. The same type of person took other types of fantasy seriously in earlier days, burning women as witches, stoning men as devils—

Abruptly Cedric deflected the control on the intercom and spoke into it. "Send Gerald Bocek in, please," he said.

A moment later the door to the reception room opened. Helena flashed Cedric a scared smile and got out of the way quickly. One police officer led the way, followed by Gerald Bocek, closely flanked by two officers with the fourth one in the rear, who carefully closed the door. It was impressive, Cedric decided. He nodded toward a chair in front of his desk and the police officers sat the strait-jacketed man in it, then hovered near by, ready for anything.

"You're Jerry Bocek?" Cedric asked.

The strait-jacketed man nodded cheerfully.

"I'm Dr. Cedric Elton, a psychiatrist," Cedric said. "Do you have any idea at all why you have been brought to me?"

"Brought to you?" Jerry echoed, chuckling. "Don't kid me. You're my old pal, Gar Castle. Brought to you? How could I get away from you in this stinking tub?"

"Stinking tub?" Cedric said.

"Spaceship," Jerry said. "Look, Gar. Untie me, will you? This nonsense has gone far enough."

"My name is Dr. Cedric Elton," Cedric enunciated. "You are not on a spaceship. You were brought to my office by the four policemen standing in back of you, and—"

Jerry Bocek turned his head and studied each of the four policemen with frank curiosity. "What policemen?" he interrupted. "You mean these four gear lockers?" He turned

his head back and looked pityingly at Dr. Elton. "You'd better get hold of yourself, Gar," he said. "You're imagining things."

"My name is Dr. Cedric Elton," Cedric said.

Gerald Bocek leaned forward and said with equal firmness, "Your name is Gar Castle. I refuse to call you Dr. Cedric Elton because your name is Gar Castle, and I'm going to keep on calling you Gar Castle because we have to have at least one peg of rationality in all this madness or you will be cut completely adrift in this dream world you've cooked up."

Cedric's eyebrows shot halfway up to his hairline.

"Funny," he mused, smiling. "That's exactly what I was just going to say to you!"

Cedric continued to smile. Jerry's serious intenseness slowly faded. Finally an answering smile tugged at the corners of his mouth. When it became a grin, Cedric laughed, and Jerry began to laugh with him. The four police officers looked at one another uneasily.

"Well!" Cedric finally gasped. "I guess that puts us on an even footing! You're nuts to me and I'm nuts to you!"

"An equal footing is right!" Jerry shouted in high glee. Then he sobered. "Except," he said gently, "I'm tied up."

"In a strait jacket," Cedric corrected.

"Ropes," Jerry said firmly.

"You're dangerous," Cedric said. "You killed six people, one of them a police officer, and wounded two other officers."

"I blasted five Venusian lizard pirates who boarded our ship," Jerry said, "and melted the door off of one gear locker, and seared the paint on two others. You know as well as I do, Gar, how space madness causes you to personify everything. That's why they drill into you that the minute you think there are more people on board the ship than there were at the beginning of the trip you'd better go to the medicine locker and take a yellow pill. They can't hurt anything but a delusion."

"If that is so," Cedric said, "why are *you* in a strait jacket?"

"I'm tied up with ropes," Jerry said patiently. "You tied me up. Remember?"

"And those four police officers behind you are gear lockers?" Cedric said. "OK, if one of those gear lockers comes around in front of you and taps you on the jaw with his fist, would you still believe it's a gear locker?"

Cedric nodded to one of the officers, and the man came around in front of Gerald Bocek and, quite carefully, hit him hard enough to rock his head but not hurt him. Jerry's eyes blinked with surprise, then he looked at Cedric and smiled. "Did you feel that?" Cedric said quietly.

"Feel what?" Jerry said. "Oh!" He laughed. "You imagined that one of the gear lockers—a police officer in your dream world—came around in front of me and hit me?" He shook his head in pity. "Don't you understand, Gar, that it didn't really happen? Untie me and I'll prove it. Before your very eyes I'll open the door on your *Policeman* and take out the pressure suit, or magnetic grapple, or whatever is in it. Or are you afraid to? You've surrounded yourself with all sorts of protective delusions. I'm tied with ropes, but you imagine it to be a strait jacket. You imagine yourself to be a psychiatrist named Dr. Cedric Elton, so that you can convince yourself that you're sane and I'm crazy. Probably you imagine yourself a very *famous* psychiatrist that everyone would like to come to for treatment. World famous, no doubt. Probably you even think you have a beautiful receptionist. What is her name?"

"Helena Fitzroy," Cedric said.

Jerry nodded. "It figures," he said resignedly. "Helena Fitzroy is the expediter at Mars Port. You try to date her every time we land there, but she won't date you."

"Hit him again," Cedric said to the officer. While Jerry's head was still rocking from the blow, Cedric said, "Now! Is it *my* imagination that your head is still rocking from the blow?"

"What blow?" Jerry said, smiling. "I felt no blow."

"Do you mean to say," Cedric said incredulously, "that there is no corner of your mind, no slight residue of rationality, that tries to tell you your rationalizations aren't reality?"

Jerry smiled ruefully. "I have to admit," he said, "when you seem so absolutely certain you're right and I'm nuts, it almost makes me doubt. Untie me, Gar, and let's try to work this thing out sensibly." He grinned. "You know, Gar, *one* of us has to be nuttier than a fruit cake."

"If I had the officers take off your strait jacket, what would you do?" Cedric asked. "Try to grab a gun and kill some more people?"

"That's one of the things I'm worried about," Jerry said. "If those pirates came back, with me tied up, you're just space crazy enough to welcome them aboard. That's why you *must* untie me. Our lives may depend on it, Gar."

"Where would you get a gun?" Cedric asked.

"Where they're always kept," Jerry said. "In the gear lockers."

Cedric looked at the four policemen, at their holstered revolvers. One of them grinned feebly at him.

"I'm afraid we can't take your strait jacket off just yet," Cedric said. "I'm going to have the officers take you back now. I'll talk with you again tomorrow. Meanwhile I want you to think seriously about things. Try to get below this level of rationalization that walls you off from reality. Once you make a dent in it the whole delusion will vanish." He looked up at the officers. "All right, take him away. Bring him back the same time tomorrow."

The officers urged Jerry to his feet. Jerry looked down at Cedric, a gentle expression on his face. "I'll try to do that, Gar," he said. "And I hope you do the same thing. I'm much encouraged. Several times I detected genuine doubt in your eyes. And—" Two of the officers pushed him firmly toward the door. As they opened it Jerry turned his head and looked back. "*Take* one of those yellow pills in the medicine locker, Gar," he pleaded. "It can't hurt you."

At a little before five-thirty Cedric tactfully eased his last patient all the way across the reception room and out, then locked the door and leaned his back against it.

"Today was rough," he sighed.

Helena glanced up at him briefly, then continued typing. "I only have a little more on this last transcript," she said.

A minute later she pulled the paper from the typewriter and placed it on the neat stack beside her.

"I'll sort and file them in the morning," she said. "It was rough, wasn't it, Doctor? That Gerald Bocek is the most unusual patient you've had since I've worked for you. And poor Mr. Potts. A brilliant executive, making half a million a year, and he's going to have to give it up. He seems so normal."

"He is normal," Cedric said. "People with above normal blood pressure often have very minor cerebral hemorrhages so small that the affected area is no larger than the head of a pin. All that happens is that they completely forget things that they knew. They can relearn them, but a man whose judgment must always be perfect can't afford to take the chance. He's already made one error in judgment that cost his company a million and a half. That's why I consented to take him on as a— Gerald Bocek really upset me, Helena. I *consent* to take a five hundred thousand dollar a year executive as a patient."

"He was frightening, wasn't he?" Helena said. "I don't mean so much because he's a mass murderer as—"

"I know. I know," Cedric said. "Let's prove him wrong. Have dinner with me."

"We agreed—"

"Let's break the agreement this once."

Helena shook her head firmly. "Especially not now," she said. "Besides, it wouldn't prove anything. He's got you boxed in on that point. If I went to dinner with you, it would only show that a wish fulfillment entered your dream world."

"Ouch," Cedric said, wincing. "That's a dirty word. I wonder how he knew about the yellow pills? I can't get out of my mind the fact that *if* we had spaceships and *if* there were a type of space madness in which you began to personify objects, a yellow pill would be the right thing to stop that."

"How?" Helena said.

"They almost triple the strength of nerve currents from end organs. What results is that reality practically shouts down any fantasy insertions. It's quite startling. I took one

three years ago when they first became available. You'd be surprised how little you actually see of what you look at, especially of people. You look at symbol inserts instead. I had to cancel my appointments for a week. I found I couldn't work without my professionally built symbol inserts about people that enable me to see them—not as they really are—but as a complex of normal and abnormal symptoms."

"I'd like to take one sometime," Helena said.

"That's a twist," Cedric said, laughing. "One of the characters in a dream world takes a yellow pill and discovers it doesn't exist at all except as a fantasy."

"Why don't we both take one?" Helena said.

"Uh uh," Cedric said firmly. "I couldn't do my work."

"You're afraid you might wake up on a spaceship?" Helena said, grinning.

"Maybe I am," Cedric said. "Crazy, isn't it? But there is one thing today that stands out as a serious flaw in my reality. It's so glaring that I actually am afraid to ask you about it."

"Are you serious?" Helena said.

"I am," Cedric nodded. "How does it happen that the police brought Gerald Bocek here to my office instead of holding him in the psychiatric ward at City Hospital and having me go there to see him? How does it happen the D.A. didn't get in touch with me beforehand and discuss the case with me?"

"I . . . I don't know!" Helena said. "I received no call. They just showed up, and I assumed they wouldn't have without your knowing about it and telling them to. Mrs. Fortesque was your first patient and I called her at once and caught her just as she was leaving the house, and told her an emergency case had come up." She looked at Cedric with round, startled eyes.

"Now we know how the patient must feel," Cedric said, crossing the reception room to his office door. "Terrifying, isn't it, to think that if I took a yellow pill all this might *vanish*—my years of college, my internship, *my fame as the world's best known psychiatrist*, and you. Tell me, Helena, are you sure you aren't an expediter at Mars Port?"

He leered at her mockingly as he slowly closed the door, cutting off his view of her.

Cedric put his coat away and went directly to the small square of one-way glass in the reception-room door. Gerald Bocek, still in strait jacket, was there, and so were the same four police officers.

Cedric went to his desk and, without sitting down, deflected the control on the intercom.

"Helena," he said, "before you send in Gerald Bocek get me the D.A. on the phone."

He glanced over the four patient cards while waiting. Once he rubbed his eyes gently. He had had a restless night.

When the phone rang he reached for it. "Hello? Dave?" he said. "About this patient, Gerald Bocek—"

"I was going to call you today," the District Attorney's voice sounded. "I called you yesterday morning at ten, but no one answered, and I haven't had time since. Our police psychiatrist, Walters, says you might be able to snap Bocek out of it in a couple of days—at least long enough so that we can get some sensible answers out of him. Down underneath his delusion of killing lizard pirates from Venus, there has to be some reason for that mass killing, and the press is after us on this."

"But why bring him to my office?" Cedric said. "It's OK, of course, but . . . that is . . . I didn't think you could! Take a patient out of the ward at City Hospital and transport him around town."

"I thought that would be less of an imposition on you," the D.A. said. "I'm in a hurry on it."

"Oh," Cedric said. "Well, OK, Dave. He's out in the waiting room. I'll do my best to snap him back to reality for you."

He hung up slowly, frowning. "*Less of an imposition!*" His whispered words floated into his ears as he snapped into the intercom, "Send Gerald Bocek in, please."

The door from the reception room opened, and once again the procession of patient and police officers entered.

"Well, well, good morning, Gar," Jerry said. "Did you

sleep well? I could hear you talking to yourself most of the night."

"I am Dr. Cedric Elton," Cedric said firmly.

"Oh, yes," Jerry said. "I promised to try to see things your way, didn't I? I'll try to co-operate with you, Dr. Elton." Jerry turned to the four officers. "Let's see now, these gear lockers are policemen, aren't they? How do you do, officers." He bowed to them, then looked around him. "And," he said, "this is your office, Dr. Elton. A very impressive office. That thing you're sitting behind is not the chart table but your desk, I gather." He studied the desk intently. "All metal, with a gray finish, isn't it?"

"All wood," Cedric said. "Walnut."

"Yes, of course," Jerry murmured. "How stupid of me. I really want to get into your reality, Gar . . . I mean Dr. Elton. Or get you into mine. I'm the one who's at a disadvantage, though. Tied up, I can't get into the medicine locker and take a yellow pill like you can. Did you take one yet?"

"Not yet," Cedric said.

"Uh, why don't you describe your office to me, Dr. Elton?" Jerry said. "Let's make a game of it. Describe parts of things and then let me see if I can fill in the rest. Start with your desk. It's genuine walnut? An executive style desk. Go on from there."

"All right," Cedric said. "Over here to my right is the intercom, made of gray plastic. And directly in front of me is the telephone."

"Stop," Jerry said. "Let me see if I can tell you your telephone number." He leaned over the desk and looked at the telephone, trying to keep his balance in spite of his arms being encased in the strait jacket. "Hm-m-m," he said, frowning. "Is the number Mulberry five dash nine oh three seven?"

"No," Cedric said. "It's Cedar sev—"

"Stop!" Jerry said. "Let me say it. It's Cedar seven dash four three nine nine."

"So you did read it and were just having your fun," Cedric snorted.

"If you say so," Jerry said.

"What other explanation can you have for the fact that it is my number, if you're unable to actually see reality?" Cedric said.

"You're absolutely right, Dr. Elton," Jerry said. "I think I understand the tricks my mind is playing on me now. I read the number on your phone, but it didn't enter my conscious awareness. Instead, it cloaked itself with the pattern of my delusion, so that consciously I pretended to look at a phone that I couldn't see, and I thought, 'His phone number will obviously be one he's familiar with. The most probable is the home phone of Helena Fitzroy in Mars Port, so I gave you that, but it wasn't it. When you said Cedar I knew right away it was your own apartment phone number.'"

Cedric sat perfectly still. Mulberry 5-9037 was actually Helena's apartment phone number. He hadn't recognized it until Gerald Bocek told him.

"Now you're beginning to understand," Cedric said after a moment. "Once you realize that your mind has walled off your consciousness from reality, and is substituting a rationalized pattern of symbology in its place, it shouldn't be long until you break through. Once you manage to see one thing as it really is, the rest of the delusion will disappear."

"I understand now," Jerry said gravely. "Let's have some more of it. Maybe I'll catch on."

They spent an hour at it. Toward the end Jerry was able to finish the descriptions of things with very little error.

"You are definitely beginning to get through," Cedric said with enthusiasm.

Jerry hesitated. "I suppose so," he said. "I must. But on the conscious level I have the idea—a rationalization, of course—that I am beginning to catch on to the pattern of your imagination so that when you give me one or two key elements I can fill in the rest. But I'm going to try, really try—Dr. Elton."

"Fine," Cedric said heartily. "I'll see you tomorrow, same time. We should make the breakthrough then."

When the four officers had taken Gerald Bocek away, Cedric went into the outer office.

"Cancel the rest of my appointments," he said.

"But why?" Helena protested.

"Because I'm upset!" Cedric said. "How did a madman whom I never knew until yesterday know your phone number?"

"He could have looked it up in the phone book."

"Locked in a room in the psychiatric ward at City Hospital?" Cedric said. "How did he know your name yesterday?"

"Why," Helena said, "all he had to do was read it on my desk here."

Cedric looked down at the brass name plate.

"Yes," he grunted. "Of course. I'd forgotten about that. I'm so accustomed to it being there that I never see it."

He turned abruptly and went back into his office.

He sat down at his desk, then got up and went into the sterile whiteness of his compact laboratory. Ignoring the impressive battery of electronic instruments he went to the medicine cabinet. Inside, on the top shelf, was the glass stoppered bottle he wanted. Inside it were a hundred vivid yellow pills. He shook out one and put the bottle away, then went back into his office. He sat down, placing the yellow pill in the center of the white note pad.

There was a brief knock on the door to the reception room and the door opened. Helena came in.

"I've canceled all your other appointments for today," she said. "Why don't you go out to the golf course? A change will do you—" She saw the yellow pill in the center of the white note pad and stopped.

"Why do you look so frightened?" Cedric said. "Is it because, if I take this little yellow pill, you'll cease to exist?"

"Don't joke," Helena said.

"I'm not joking," Cedric said. "Out there, when you mentioned about your brass name plate on your desk, when I looked down it was blurred for just a second, then became sharply distinct and solid. And into my head popped the memory that the first thing I do when I have to get a new receptionist is get a brass name plate for her, and when she quits I make her a present of it."

"But that's the truth," Helena said. "You told me all about it when I started working for you. You also told me that while you still had your reason about you I was to solemnly promise that I would never accept an invitation from you for dinner or anything else, because business could not mix with pleasure. Do you remember that?"

"I remember," Cedric said. "A nice pat rationalization in any man's reality to make the rejection be my own before you could have time to reject me yourself. Preserving the ego is the first principle of madness."

"But it isn't!" Helena said. "Oh, darling, I'm *here!* This is *real!* I don't care if you fire me or not. I've loved you forever, and you mustn't let that mass murderer get you down. I actually think he isn't insane at all, but has just figured out a way to seem insane so he won't have to pay for his crime."

"You think so?" Cedric said, interested. "It's a possibility. But he would have to be as good a psychiatrist as I am—You see? Delusions of grandeur."

"Sure," Helena said, laughing thinly. "Napoleon was obviously insane because he thought he was Napoleon."

"Perhaps," Cedric said. "But you must admit that if you are real, my taking this yellow pill isn't going to change that, but only confirm the fact."

"And make it impossible for you to do your work for a week," Helena said.

"A small price to pay for sanity," Cedric said. "No, I'm going to take it."

"You aren't!" Helena said, reaching for it.

Cedric picked it up an instant before she could get it. As she tried to get it away from him, he evaded her and put it in his mouth. A loud gulp showed he had swallowed it.

He sat back and looked up at Helena curiously.

"Tell me, Helena," he said gently. "Did you know all the time that you were only a creature of my imagination? The reason I want to know is—"

He closed his eyes and clutched his head in his hands.

"God!" he groaned. "I feel like I'm dying! I didn't feel like this the other time I took one." Suddenly his mind steadied, and his thoughts cleared. He opened his eyes.

On the chart table in front of him the bottle of yellow pills lay on its side, pills scattered all over the table. On the other side of the control room lay Jerry Bocek, his back propped against one of the four gear lockers, sound asleep, with so many ropes wrapped around him that it would probably be impossible for him to stand up.

Against the far wall were three other gear lockers, two of them with their paint badly scorched, the third with its door half melted off.

And in various positions about the control room were the half-charred bodies of five blue-scaled Venusian lizards.

A dull ache rose in Gar's chest. Helena Fitzroy was gone. Gone, when she had just confessed she loved him.

Unbidden, a memory came into Gar's mind. Dr. Cedric Elton was the psychiatrist who had examined him when he got his pilot's license for third-class freighters—

"God!" Gar groaned again. And suddenly he was sick. He made a dash for the washroom, and after a while he felt better.

When he straightened up from the wash basin he looked at his reflection in the mirror for a long time, clinging to his hollow cheeks and sunken eyes. He must have been out of his head for two or three days.

The first time. Awful! Somehow, he had never quite believed in space madness.

Suddenly he remembered Jerry. Poor Jerry!

Gar lurched from the washroom back into the control room. Jerry was awake. He looked up at Gar, forcing a smile to his lips. "Hello, Dr. Elton," Jerry said.

Gar stopped as though shot.

"It's happened, Dr. Elton, just as you said it would," Jerry said, his smile widening.

"Forget that," Gar growled. "I took a yellow pill I'm back to normal again."

Jerry's smile vanished abruptly. "I know what I did now," he said. "It's terrible. I killed six people. But I'm sane now. I'm willing to take what's coming to me."

"Forget that!" Gar snarled. "You don't have to humor me now. Just a minute and I'll untie you."

"Thanks, Doctor," Jerry said. "It will sure be a relief to get out of this strait jacket."

Gar knelt beside Jerry and untied the knots in the ropes and unwound them from around Jerry's chest and legs.

"You'll be all right in a minute," Gar said, massaging Jerry's limp arms. The physical and nervous strain of sitting there immobilized had been rugged.

Slowly he worked circulation back into Jerry, then helped him to his feet.

"You don't need to worry, Dr. Elton," Jerry said. "I don't know why I killed those people, but I know I would never do such a thing again. I must have been insane."

"Can you stand now?" Gar said, letting go of Jerry.

Jerry took a few steps back and forth, unsteadily at first, then with better co-ordination. His resemblance to a robot decreased with exercise.

Gar was beginning to feel sick again. He fought it.

"You OK now, Jerry boy?" he asked worriedly.

"I'm fine now, Dr. Elton," Jerry said. "And thanks for everything you've done for me."

Abruptly Jerry turned and went over to the air-lock door and opened it.

"Good-by now, Dr. Elton," he said.

"Wait!" Gar screamed, leaping toward Jerry.

But Jerry had stepped into the air lock and closed the door. Gar tried to open it, but already Jerry had turned on the pump that would evacuate the air from the lock.

Screaming Jerry's name senselessly in horror, Gar watched through the small square of thick glass in the door as Jerry's chest quickly expanded, then collapsed as a mixture of phlegm and blood dribbled from his nostrils and lips, and his eyes enlarged and glazed over, then one of them ripped open and collapsed, its fluid draining down his cheek.

He watched as Jerry glanced toward the side of the air lock and smiled, then spun the wheel that opened the air lock to the vacuum of space, and stepped out.

And when Gar finally stopped screaming and sank to the deck, sobbing, his knuckles were broken and bloody from pounding on bare metal.

RIVER OF RICHES

by Gerald Kersh

For some reason, s-f has enjoyed a rather more reputable name in Great Britain than it has here—or at least a good many more "literary" British authors have written it. (Kipling, Wells, Dunsany, Doyle, Chesterton, Priestley, Collier, Copard, to name a few.)

In this country, fantasy, beginning with Hawthorne, has a long record of respectability; but even the best science fiction (with the notable exception of a few offbeat efforts by "major" writers, such as Stephen Vincent Benét's "By the Waters of Babylon") could be found ordinarily only in pulp magazines.

All this, of course, was B.B.—Before the Bomb. Then when s-f did achieve a measure of popular approval here, one of the first science-fiction stories printed in a top national magazine was by a British author. (Not the first. Heinlein beat Kersh to *The Saturday Evening Post* by about two months, early in 1947.)

Though Mr. Kersh lives in this country now, and is one of the more colorful lights in the New York literary firmament, much of his work retains the flavor of the traditionally English adventure story. This one is a tale told in a barroom, by that classic adventurer, the "younger son of a younger son."

About the man called Pilgrim there was a certain air of something gone stale. "Seedy" is the word for it, as applied to a human being. It was difficult to regard him except as a careful housewife regards a pot of homemade jam upon the surface of which she observes a patch of mildew. *Sweet but questionable*, she says to herself, *but it is a pity to waste it. Give it to the poor*. So, as it seemed to me, it was with Pilgrim.

He was curiously appealing to me in what looked like a losing fight against Skid Row, and maintained a haughty

reserve when the bartender, detaining him as he abstractedly started to stroll out of MacAroon's Grill, said, "Daddle be a dollar-ten, doc."

Pilgrim slapped himself on the forehead, and beat himself about the pockets, and cried, "My wallet! I left it at home."

"Oh-oh," the bartender said, lifting the counter flap.

Then I said, "Here's the dollar-ten, Mike. Let the man go."

But Pilgrim would not go. He took me by the arm, and said in the old-fashioned drawling kind of Oxford accent, "No, but really, this is too kind! I'm afraid I can't reciprocate. As a fellow limey you will understand. One's position here becomes invidious. You see, I have only just now lost two fortunes, and am in the trough of the wave between the second and the third—which I assure you is not farther off than the middle of next month. I must get to Detroit. But allow me to introduce myself by the name by which I prefer to be known: John Pilgrim. Call me Jack. In honesty, I ought to tell you that this is not my real name. If some plague were to wipe out the male members of my family in a certain quarter of Middlesex, in England, I should be addressed very differently; and ride my horses, to boot. As matters stand, I am the younger son of a younger son, cast out with a few thousand pounds in my pocket, to make my fortune in Canada."

I asked, "Was that your first fortune?"

"Heavens, no! Man on the boat had an infallible system shooting dice. I arrived in Canada, sir, with four dollars and eighteen cents—and my clothes. I roughed it, I assure you. Clerk in a hardware store, dismissed on unjust suspicion of peculation; errand boy at a consulate, kicked out for what they called 'shaking down' an applicant for a visa, which was a lie; representative of a wine merchant, wrongly accused of drinking the samples. I went through the mill, I do assure you. And now I am offered a lucrative post in Detroit."

"Doing what?" I asked.

He said, "Checking things for a motor company."

"What things?"

"A word to the wise is sufficient. This is strictly hush-hush. Less said the better, what? But I can put you in the way of a few million dollars if you have time and money to spare."

"Pray do so," I said.

"I will. But not being a complete fool I will not be exact in my geography. Do you know Brazil? I know where there is a massive fortune in virgin gold in one of the tributaries of the Amazon. . . . Oh, dear, it really is a bitter fact that men with money who want some more insist on having the more before they lay out the less! Yet I tell you without the least reserve that I got about ten thousand ounces of pure gold out of the people who live by that river."

"How did you manage that?" I asked.

Pilgrim smiled at me, and said, "I dare say you have heard of the *tocte nut*? No? . . . Well, the *tocte nut* comes from Ecuador. It is something like an English walnut, only perfectly oval, almost. As in the case of the walnut, the kernel of the *tocte nut* resembles in its lobes, twists and convolutions, the human brain. It is bitter to eat, and is used generally by children for playing with, as we used to play with marbles.

"Ah, but this is in Ecuador. Go into Brazil, into a certain tributary of the Amazon, and I can show you a place where these nuts—or close relations of theirs—are taken very seriously indeed. The tribesmen do not call them *tocte*, but *tictoc*, and only adults play with these nuts in Brazil—for extremely high stakes too. Fortunes—as they are counted in these wild parts—are won or lost on one game with the *tictoc* nuts. The savages have a saying there: '*Tictoc* takes twenty years to learn.' To proceed:"

From vicissitude to vicissitude is the destiny of the younger son (he said). I could, of course, have written to my elder brother for money. In fact I did. But he didn't answer. In the end, I shipped as cook on a freighter bound for South America. I suspect it was running guns. The crew was composed of the offscourings of Lapland, Finland, Iceland and San Francisco.

I jumped ship first opportunity, with nothing in my

pockets but the papers of an oiler named Martinsen which I must have picked up by accident, and looked, as one does, for a fellow countryman. Luckily—I have the most astonishing luck—I overheard a man in a bar ordering whisky and soda without ice. Blood calls to blood. I was at his elbow in a trice.

He was a huge fellow, and was about to go to the place—which, if you'll forgive me, I won't mention—prospecting for rubies. Desirous of civilized company, he invited me to come along with him—said he would make it worth my while—offered me a share in the profits. He found the equipment, of course: quinine, rifles, trade goods, shotguns, soap and all that.

His idea was that, the market being good just then, if the worst came to the worst we might make our expenses out of snake skin and alligator hide. His name was Grimes, but he knew a gentleman when he saw one. But he was accident prone. Exploring mud for rubies, Grimes stood on a log to steady himself. The log came to life, opened a pair of jaws, and carried him off—an alligator, of course. They tell me that a mature alligator can, with his jaws, exert a pressure of nearly one thousand pounds' weight. It upset me, I don't mind telling you. Ever since then I have never been able to look at an alligator without disgust. They bring me bad luck.

The following morning I awoke to find my attendants all gone. They had paid themselves in trade goods, leaving me with only what I slept in—pajamas—plus a rifle, a bandoleer of .30-30 cartridges, my papers, and some dried beef.

Goodness only knows what might have happened to me if I had not been rescued by cannibals—and jolly fine fellows they were too. Sportsmen, I assure you. They only ate women past marriageable age. They took me to their chief. I thought I was in a pretty sticky spot, at first, but he gave me some stew to eat—it was monkey, I hope—and while I ate I looked about me. Anyone could see with half an eye that the old gentleman wanted my rifle.

Now I reasoned as follows: I am outnumbered about two hundred and fifty to one by savages armed with spears and poisoned arrows. In the circumstances my rifle must be

worse than useless. Better make a virtue of the inevitable and give it to him before he takes it away. Be magnanimous, Jack!

So, expressing delight at the flavor of the stew, I gave him the rifle and the bandoleer. He was overwhelmed with joy and gratitude and wanted to know what he could do for me. He offered me girls, more stew, necklaces of human teeth. I conveyed to him that I might prefer a few rubies. Heartbroken, he said that he had none of the red stones, only the green ones, and handed me a fistful of emeralds to the value, conservatively, of a thousand rifles at a hundred and twenty dollars apiece.

I thanked him politely, controlling my emotions as our sort of people are brought up to do. But he mistook my impassive air for disappointment. He was downcast for a moment or two. Then he brightened and said to me, "Wait. I have something that will make you very rich. It has made me chief. But now I am too old to play. I will give it to you."

Then he fumbled in what might laughingly be described as his clothes, and produced—guess what—a nut! Upon my word, a common nut, something like a walnut, but smooth and much larger in circumference at one end than at the other. Through years of handling, it had a wonderful patina, like very old bronze. "You know tictoc?" the old boy asked.

"I know tocte," I said. "It is a game played by children in Ecuador."

"You play?" he asked.

"Never. In Ecuador I have seen it played. In England we call it marbles."

"Of these places," said the chief. "I have never heard. Here, it is tictoc."

Then he went on to explain—it took all night—that the tictoc nut was not like other nuts. Everything, said the chief, everything could think a little. Even a leaf had sense enough to turn itself to the light. Even a rat. Even a woman. Sometimes, even a hard-shelled nut. Now when the world was made, the deuce of a long time ago, man having been created, there was a little intelligence left over for distribution. Woman got some. Rats got some. Leaves got some.

Insects got some. In short, at last there was very little left.

Then the tictoc bush spoke up and begged, "A little for us?"

The answer came, "There are so many of you, and so little left to go around. But justice must be done. One in every ten million of you shall think with a man, and do his bidding. We have spoken."

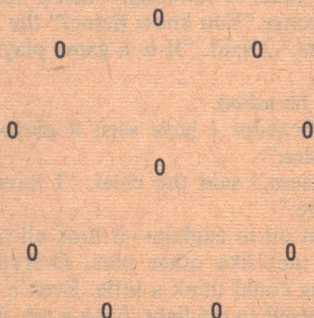
So, the old geezer affirmed, the kernel of the tictoc nut came to resemble the human brain. Stroking his great knife, he assured me that he had many times seen one, and the resemblance was uncanny. Superficially, you understand.

To only one tictoc nut in ten million was vouchsafed the gift of thought. And the nuts, being very prolific, grew in the jungles in great profusion. Anyone who could find the ten-millionth nut, the thinking nut, was assured of good fortune, the old savage told me, because this nut would obey its master.

"Now play tictoc," he said.

I said, "But I don't know how."

He did not answer, but led me to a strip of ground stamped flat and level, and polished by innumerable feet. At one end someone had described a circle drawn with ocher. In this circle were arranged ten nuts in this pattern:



The object of the game was to knock the ten nuts out of the circle in the fewest possible shots. As a game, I should say that tictoc was much more difficult than pool, pyramids

or snooker. You shot from a distance of about seven feet. It was a good player who could clear the circle in five shots; a remarkable one who could do it in four; a superlative one who could do it in three, flipping the oval tictoc nut with a peculiar twist of the thumb.

Several young fellows were playing, but more were betting their very loincloths on the champion, who had recently made a Three.

"Now," the old codger whispered, "rub the tictoc between your hands, breathe on it and shout without sound—shout at the back of your mind—telling it what to do. Challenge the champion. Stake your shirt."

The top of my pajamas could be no great loss. Furthermore, I had the emeralds, you know. So I took it off and offered my challenge. The young buck felt the cotton and put down against it a necklace of gold nuggets, the largest of which was about as big as a grape.

He played first. On his first shot, out went five. Second, out went four. The last was easy. He had scored a Three.

And now it was my turn. Caressing my nut I said to it, without talking, "Now, old thing, show them what you can do. Try for a One, just to astonish the natives."

Without much hope, and with no skill at all, I flipped my nut. It seemed to stop halfway, gyrating. Everybody laughed, and my opponent reached for my pajama top—when, suddenly, my nut kind of shouldered its way forward into the circle, and with something devilishly like careful aim, spun its way into the ten and pushed them, one by one, beyond the bounds of the ring.

You never heard such a shout! I had broken a record. Picking my nut up, I caressed it and warmed it in my hand.

The chief said, "This I have never seen. Two, yes. One, no. I know what it is—the markings inside that nut must exactly match the markings of your brain. You are a lucky man."

Feeling the weight of the necklace I had won, I asked, "Is there any more stuff like this hereabout?"

He said no, they didn't regard it especially. The ex-champion had won it downstream, where they picked it out of the river bed and gave it to their women for orna-

ments. A string of your enemy's teeth meant something. But the yellow stuff was too soft and too heavy. "If you want it, take your tictoc nut and you can win as much of it as you can carry away—you and ten strong men."

I promised him that when I came back I would bring more guns and bullets, hatchets, knives, and all his heart could desire, if he would lend me a good canoe and the services of half a dozen sturdy men to paddle it, together with food and water. He agreed, and we took off.

In fine, I cleaned out that village and went on downstream with two war canoes, all loaded with gold and other valuables, such as garnets, emeralds, et cetera. I should have left it at that. But success had gone to my head.

On the way I stayed the night in the shack of a petty trader, a Portuguese, from whom I bought a whole suit of white-duck clothes, a couple of shirts, and pants and some other stuff. Your fame has gone before you," he said, looking enviously at me and then at the gold nuggets I had paid him with. "They call you the Tictoc Man up and down the river. Now I happen to know that no white man can play tictoc—it takes twenty years to learn. How do you do it?"

I said, "A mere knack."

"Well, give me another nugget and I'll give you some good advice. . . . Thank you. My advice is, make straight for the big river, and so to the coast. Don't stop to play at the next village—there is only one—or you may regret it. The Esporco are the most villainous Indians in these parts. Don't push even your luck too far. Four ounces of gold, and I'll let you have a fine weapon, a revolver, all the way from Belgium."

The revolver I took, but not his advice, and we went on at dawn. In the late afternoon several canoes came out to meet us. My men spat and said, "Esporco, master—very bad."

"What, will they attack us?" I asked.

"No." They indicated that the Esporco Indian was the worst trickster and cheat in the Mato Grosso. But I fondled the tictoc nut, while observing that in every canoe sat a girl wearing a necklace of raw rubies, and little else.

The men—big fellows, as Indians go—had an easy, cozy way with them, all smiles, no weapons, full of good humor. They hailed me as Senhor Tictoc, while the girls threw flowers.

My leading paddler, the stroke as it were, growled, "When Esporco bring flowers, keep your hand on your knife"—a savage version of *Timeo Danaos et dona ferentes*.

Still, I gave orders to land, and was received with wild delight. The chief ordered several young goats killed. I presented him with a sack of salt, which is highly prized thereabout. There was a banquet with a profusion of some slightly effervescent drink in the nature of the Mexican mescal, only lighter and breezier.

In a little while we started to talk business. I expressed interest in rubies. The chief said, "Those red things? But they are nothing." And, taking a magnificent necklace from one of the girls, he tossed it into the river—I was to learn, later, that he had a net there to catch it. "I have heard that you are interested in stones," said he, while I gaped like a fish. And he went away and came back with an uncut diamond of the Brazilian variety, as big as your two fists.

I displayed no emotion, but said, "Interesting. How much do you want for it?"

He said, "It has no price. I have been around, and know the value your people set on such stones. I also know—we all know on this river—what would happen if the news got about that there was gold, rubies, emeralds and diamonds hereabout. Your people would come down on us like jaguars, and drive us off the face of the earth. As it is, we have enough, we are contented, we regard such stuff as this as pretty for unmarried girls. No, my friend, it is not for sale. But I tell you what. It being a plaything, let us play for it. You have a great reputation as a tictoc player. As it happens, so have I. Now what have you to stake against this stone?"

"Three canoeloads of treasure," I said.

At this, one of his sons chimes in with, "Don't do it, father! The man is a wizard. All the river knows it. He has a thinking nut!"

Apparently tipsy, the chief shouted, "Silence, brat! There

is no such thing. It is a superstition. Tictoc is a game of skill, and I am the best man on this river." He became angry. "Who questions my skill?"

Nobody did. The circle was made, the ten nuts arranged at their proper distances. I begged my host to shoot first. There was a breathless hush as he went down on his knees and shot a perfect Two—at which there was a murmur of applause.

Then I stroked my nut and asked it for a One. Out it went, spinning like a little whirlwind, and a One it was.

It is etiquette, in the tictoc game, for the winner to pick up the fighting nuts and bring them back to the base. Loser shoots first. This time the chief shot a Three. I was feeling warmhearted. Who wouldn't, if he was certain to win a diamond that would make the Koh-i-noor and the Cullinan diamonds look like stones in a fifty-dollar engagement ring? So I said to my nut, "This time, for the sport of the thing, get me a Five. But last shot we'll have another One and the best out of three games."

It did as it was bid, and I lost with a Five. The chief, much elated got our nuts and handed me mine with grave courtesy. I shot with perfect confidence. Imagine my horror when, instead of moving with grace and deliberation, it reeled drunkenly forward and barely reached the periphery of the circle! I wondered, could that mescal-like stuff I had drunk have gone to its head through mine? Thinking with all my might, I shot again—and knocked one nut out of the ring. A third time, and I finished with an Eight.

The chief went to pick up our nuts. I was numb with grief. He handed me the nut I had played that last game with. I looked at it—and it was not my own!

Then the truth dawned on me. The old rascal had swapped nuts after the second game! Simple as that. But I kept my temper, because in a split second everybody had stopped laughing, and every man had produced a machete, an ax, a bow or a spear. I said, "There is some mistake here, sir. This is not my tictoc nut."

"Then whose is it?"

"Yours. You are, no doubt inadvertently, holding mine in your hand. Give it back, if you please."

And driven beyond prudence, I made a grab at it. I was fast, but he was faster, and surprisingly strong. I, too, am tolerably strong in the fingers. We stood locked, hand to hand, for about twenty seconds. Then I heard and felt a sharp little crack. So did he, for he stood back, waving away his tribesmen who were closing in.

He held out his hand with dignity; it held the common tictoc nut that he had palmed off on me. In my palm lay my own true nut, but split down the center, exposing the kernel.

I looked at it, fascinated. You know, I studied medicine once—might be in Harley Street by now, only there was a bureaucratic misunderstanding about four microscopes I borrowed. Silly old asses! I'd have got them out of pawn and put them back where I'd found them, as soon as my remittance came in. But no, they gave me the sack.

However, I have read some anatomy, and I solemnly swear that the kernel of my poor tictoc nut definitely and in detail resembled the human brain—convolutions, lobes, cerebrum, cerebellum, medulla—in every respect.

Most remarkable of all, when I touched it affectionately with my finger tip, it throbbed very faintly, and then lay still. Whereupon some of the virtue seemed to drain out of me, and I cried like a child.

But I pulled myself together and said, "Well, the bet is off. The game is null and void. Let me get my men together and push off."

Then, in the light of torches, I saw bundles on the shore—very familiar bundles.

"To save your men unnecessary exertion," the chief said, "I had them unload your canoes for you. I wish you no harm, but put it to you that you go quietly back where you belong. Come, you shall not go empty handed. Take as many small nuggets as your two hands can hold, and depart in peace. You overreached yourself. I would have given you the diamond for the thinking nut, and gladly, in fair exchange. But no, you had to cheat, to do bad trade, to bet on a sure thing. In this life, nothing is sure."

I said, holding out the revolver, "And what will you give me for this?"

"Oh, two double handfuls of gold."

"May I suggest three?"

"If you will allow me to test it first."

I did. He fired one shot into the dark. I took the gun back and said, "First, the gold."

Down by the river I took the liberty of scooping up a handful of heavy clay and filling up the barrel of that revolver. It would dry like brick. That old rogue would never play tictoc again.

But in burying the remains of my thinking nut, I had a weird feeling that I was leaving behind a certain essential portion of myself. Gold and jewels I can get again. But that, never.

"So I got to the coast and took ship, as a passenger this time, on a heavy freighter bound for Tampa, Florida. What with one thing and another, I arrived with only a few nuggets left, which I keep as . . . I don't know, call it keepsakes. You have been very kind to me. Let me give you one—a very little one—and then I must be on my way. Have this one."

He dropped a heavy gold pellet on the wet table. It was not much larger than a pea, but shaped, or misshapen, beyond human conception. Fire and water had done that.

"Have it made into a tie pin," said Pilgrim.

"But I couldn't take a valuable thing like this," I cried, "without doing something for you in return!"

"Not a bit of it. We limeys must stick together, and I'm on my way to Detroit. About seven days from now, John Pilgrim, at Detroit's leading hotel, will find me. Help me on my way, if you like, but—" He shrugged.

"I have only ten dollars," I said, deeply moved by a certain sadness in Pilgrim's eyes. "You're welcome to that."

"You're very obliging. It shall be returned with interest."

"I must go now," I said.

"So must I," said he.

Marveling at the intricacies of the human mind, I walked until I found myself on Sixth Avenue, near West 46th Street, in which area congregate those who, with pitying smiles and a certain kind of shrug, can flaw a diamond carat

by carat until you are ashamed to own it, and with a shake of the head depreciate a watch until it stops of its own accord. On impulse I went into a shop there and, putting down Pilgrim's nugget, asked what such a bit of gold might be worth.

His reply was, "Ya kiddin'? Tickle me so I'll laugh. What's the current price of printer's metal? . . . Worth? Kugel's Kute Novelties sell those twelve for fifty cents, mail order. I can get 'em for ya a dollar for two dozen. A teaspoonful lead, melt it and drop it in cold water. You can honestly advertise 'no two alike.' Gild 'em, and there's a nugget. A miniature gold brick. That manufacturer, so he puts out loaded dice 'for amusement only'—he sells 'em too. Seriously, did you buy this?"

I said, "Yes and no." But as I dropped the nugget into my pocket and turned to go, the shopman said, "Wait a minute, mister—it's a nice imitation and a good job of plating. Maybe I might give you a couple bucks for it!"

"Oh, no, you won't," I said, my suspicions aroused. I fondled the nugget in my pocket; it had the indescribable, authentic feel of real gold. As for that trick with melted lead and cold water, I suddenly remembered that I had played it myself about thirty years ago, with some broken toy soldiers, just for the sake of playing with fire. Recently-melted lead has a feel all its own, and is sharp at the edges. But my nugget felt old and worn.

"It could be, after forty years, for once I made a mistake," the man said. "Let's have another look."

But I went out, and visited another shop a few doors away: one of those double-fronted establishments, in the right-hand window of which, under a sign which says OLD GOLD BOUGHT, there lies a mess of pinchbeck bracelets, ancient watch chains, old false teeth, and tie pins. In the other window, diamonds carefully carded and priced at anything between two thousand and fifteen thousand dollars. The proprietor, here, looked as if he were next door but one to the headline.

I put down my nugget and said boldly, "How much for this?"

He scrutinized the nugget, put it in a balance and

weighed it; then tested it on a jeweler's stone, with several kinds of acid. "Voigin gold," he said. "Where'd you get it?"

"A friend gave it to me."

"I wish I had such friends." He called, "Oiving, come here a minute," and a younger man came to his side. "What d'you make of this?"

Irving said, "It ain't African gold. It ain't Indian gold. It ain't a California nugget. I say South America."

"Good boy. Correct."

"How can you tell?" I asked.

He shrugged. "You loin," he said. "How d'you tell the difference between salt and sugar? You loin. . . . The market value of this little bit voigin gold is about forty dollars. I got to make a buck—I'll give you thoity-five."

"Eh?"

"Thoity-six, and not a penny more," he said, counting out the money. "And if your friend gives you any more, come to me with 'em."

I took the money, caught a taxi, and hurried back to MacAroon's place. The bartender was gazing into space.

"That man I was sitting with," I said, "where is he?"

The bartender, with a sardonic smile, said, "He put the bite on you, huh? I can smell a phony a mile off. I didn't like the looks of him as soon as he set foot in my bar. If I was you—"

"Which way did he go?"

"I didn't notice. Soon after you left he ordered a double, no ice and put down a ten-dollar bill—left me fifty cents, and went out."

"Here's my telephone number," I said. "If he turns up again, call me any hour of the day or night, and hold him till I get here. Here's five dollars on account; another five when you call."

But Pilgrim never came to MacAroon's again.

I inquired high and low—mostly low—but found no trace of him. A British-sounding man with an insinuating air, a malarial complexion and a misleading eccentric manner, who talks about the River Amazon and its tributaries—I will pay a substantial reward for information leading to his rediscovery.

SATELLITE PASSAGE

by Theodore L. Thomas

Back to Cain and Abel, and ever since that time, there have been restless men, dissatisfied ones, the rovers, explorers, and adventurers. They are the men who traveled to India, discovered China, stumbled across America, pushed through the jungles of the Congo and the Amazon, charted the oceans, crested the mountains, and dog-sledded to the poles. To the stay-at-homes, these wanderers are sometimes heroes, sometimes worthless bums, depending as often as not on whether they do bring home nuggets of real gold (or silks, spices, slaves, oil leases). Now, very soon—as matters look, within our own lifetimes—the rovers will be going out to space. They will man our satellites and space stations, mine our moon, and colonize the other planets; eventually, it is they who will represent us to whatever alien life may have spawned from other stars.

Ted Thomas has a faculty for imagining life in space with such sharp realism that you can almost see and feel and taste it as you read. Here he tells the story of an embattled, proud and lonely man, a wanderer and a fighter, who must make a split-second decision for or against the community of mankind.

The three men bent over the chart and once again computed the orbit. It was quiet in the satellite, a busy quiet broken by the click of seeking microswitches and the gentle purr of smooth-running motors. The deep pulsing throb of the air conditioner had stopped; the satellite was in the Earth's shadow and there was no need for cooling the interior.

"Well," said Morgan, "it checks. We'll pass within fifty feet of the other satellite. Too close. Think we ought to move?"

Kaufman looked at him and did not speak. McNary

glanced up and snorted. Morgan nodded. He said, "That's right. If there's any moving to be done, let them do it." He felt a curious nascent emotion, a blend of anger and exhilaration—very faint now, just strong enough to be recognizable. The pencil snapped in his fingers, and he stared at it, and smiled.

Kaufman said, "Any way we can reline this a little? Fifty feet cuts it kind of close."

They were silent, and the murmuring of machinery filled the cramped room. "How's this?" said McNary. "Wait till we see the other satellite, take a couple of readings on it, and compute the orbit again. We'd have about five minutes to make the calculations. Morgan here can do it in less than that. Then we'd know if we're on a collision course."

Morgan nodded. "We could do it that way." He studied the chart in front of him. "The only thing, those boys on the other satellite will see what we're doing. They'll know we're afraid of a collision. They'll radio it down to Earth, and—you know the Russian mind—we'll lose face."

"That so bad?" asked Kaufman.

Morgan stared at the chart. He answered softly, "Yes, I think it is. The Russians will milk it dry if we make any move to get our satellite out of the way of theirs. We can't do that to our people."

McNary nodded. Kaufman said, "Agree. Just wanted to throw it out. We stay put. We hit, we hit."

The other two looked at Kaufman. The abrupt dismissal of a serious problem was characteristic of the little astronomer; Kaufman wasted no time with second guesses. A decision made was a fact accomplished; it was over.

Morgan glanced at McNary to see how he was taking it. McNary, now, big as he was, was a worrier. He stood ready to change his mind at any time, whenever some new alternative looked better. Only the soundness of his judgment prevented his being putty in any strong hands. He was a meteorologist, and a good one.

"You know," said McNary, "I still can't quite believe it. Two satellites, one pole-to-pole, the other equatorial, both having apogees and perigees of different elevations—yet they wind up on what amounts to a collision course."

Morgan said, "That's what regression will do for you. But we haven't got any time for that; we've got to think this out. Let's see, they'll be coming up from below us at passage. Can we make anything of that?"

There was silence while the three men considered it. Morgan's mind was focused on the thing that was about to happen; but wisps of memory intruded. Faintly he could hear the waves, smell the bite in the salt sea air. A man who had sailed a thirty-two-foot ketch alone into every corner of the globe never thereafter quite lost the sound of the sea in his ear. And the struggle, the duel, the strain of out-guessing the implacable elements, there was a test of a man. . . .

"Better be outside in any case," said Kaufman. "Suited up and outside. They'll see us, and know we intend to do nothing to avoid collision. Also, we'll be in a better position to cope with anything that comes along, if we're in the suits."

Morgan and McNary nodded, and again there was talk. They discussed the desirability of radio communication with the other satellite, and decided against it. To keep their own conversations private, they agreed to use telephone communication instead of radio. When the discussion trailed off, Kaufman said, "Be some picture, if we have the course computed right. We stand there and wave at 'em as they go by."

Morgan tried to see it in his mind: three men standing on a long, slim tube, and waving at three men on another. The first rocket passage, and me waving. And then Morgan remembered something, and the image changed.

He saw the flimsy, awkward planes sputtering past each other on the morning's mission. The pilots, detached observers, noncombatants really, waved at each other as the rickety planes passed. Kindred souls they were, high above the walks of normal men. So they waved . . . for a while.

Morgan said, "Do you suppose they'll try anything?"

"Like what?" said Kaufman.

"Like knocking us out of orbit if they can. Like shooting at us if they have a gun. Like throwing something at us, if they've got nothing better to do."

"My God," said McNary, "you think they might have brought a gun up here?"

Morgan began examining the interior of the tiny cabin. Slowly he turned his head, looking at one piece of equipment after another, visualizing what was packed away under it and behind it. To the right of the radio was the space-suit locker, and his glance lingered there. He reached over, opened the door and slipped a hand under the suits packed in the locker. For a moment he fumbled and then he sat back holding an oxygen flask in his hand. He hefted the small steel flask and looked at Kaufman. "Can you think of anything better than this for throwing?"

Kaufman took it and hefted it in his turn, and passed it to McNary. McNary did the same and then carefully held it in front of him and took his hand away. The flask remained poised in mid-air, motionless. Kaufman shook his head and said, "I can't think of anything better. It's got good mass, fits the hand well. It'll do."

Morgan said, "Another thing. We clip extra flasks to our belts and they look like part of the standard equipment. It won't be obvious that we're carrying something we can throw."

McNary gently pushed the flask toward Morgan, who caught it and replaced it. McNary said, "I used to throw a hot pass at Berkeley. I wonder how the old arm is."

The discussion went on. At one point the radio came to life and Kaufman had a lengthy conversation with one of the control points on the surface of the planet below. They talked in code. It was agreed that the American satellite should not move to make room for the other, and this information was carefully leaked so the Russians would be aware of the decision.

The only difficulty was that the Russians also leaked the information that their satellite would not move, either.

A final check of the two orbits revealed no change. Kaufman switched off the set.

"That," he said, "is the whole of it."

"They're leaving us pretty much on our own," said McNary.

"Couldn't be any other way," Morgan answered. "We're the ones at the scene. Besides"—he smiled his tight smile—"they trust us."

Kaufman snorted. "Ought to. They went to enough trouble to pick us."

McNary looked at the chronometer and said, "Three quarters of an hour to passage. We'd better suit up."

Morgan nodded and reached again into the suit locker. The top suit was McNary's, and as he worked his way into it, Morgan and Kaufman pressed against the walls to give him room. Kaufman was next, and then Morgan. They set out the helmets, and while Kaufman and McNary made a final check of the equipment, Morgan took several sights to verify their position.

"Luck," said Kaufman, and dropped his helmet over his head. The others followed and they all went through the air-sealing check-off. They passed the telephone wire around, and tested the circuit. Morgan handed out extra oxygen flasks, three for each. Kaufman waved, squeezed into the air lock and pulled the hatch closed behind him. McNary went next, then Morgan.

Morgan carefully pulled himself erect alongside the outer hatch and plugged the telephone jack into his helmet. As he straightened, he saw the Earth directly in front of him. It loomed large, visible as a great mass of blackness cutting off the harsh white starshine. The blackness was smudged with irregular patches of orangish light that marked the cities of Earth.

Morgan became aware that McNary, beside him, was pointing toward the center of the Earth. Following the line of his finger Morgan could see a slight flicker of light against the blackness; it was so faint that he had to look above it to see it.

"Storm," said McNary. "Just below the equator. It must be a pip if we can see the lightning through the clouds from here. I've been watching it develop for the last two days."

Morgan stared, and nodded to himself. He knew what it was like down there. The familiar feeling was building

up, stronger now as the time to passage drew closer. First the waiting. The sea, restless in expectancy as the waves tossed their hoary manes. The gathering majesty of the elements, reaching, searching, striving. . . . And if at the height of the contest the screaming wind snatched up and smothered a defiant roar from a mortal throat, there was none to tell of it.

Then the time came when the forces waned. A slight let-up at first, then another. Soon the toothed and jagged edge of the waves subsided, the hard side-driven spray and rain assumed a more normal direction.

The man looked after the departing storm, and there was pain in his eyes, longing. Almost, the words rose to his lips, "Come back, I am still here, do not leave me, come back." But the silent supplication went unanswered, and the man was left with a taste of glory gone, with an emptiness that drained the soul. The encounter had ended, the man had won. But the winning was bitter. The hard fight was not hard enough. Somewhere there must be a test sufficient to try the mettle of this man. Somewhere there was a crucible hot enough to float any dross. But where? The man searched and searched, but could not find it.

Morgan turned his head away from the storm and saw that Kaufman and McNary had walked to the top of the satellite. Carefully he turned his body and began placing one foot in front of the other to join them. Yes, he thought, men must always be on top, even if the top is only a state of mind. Here on the outer surface of the satellite, clinging to the metallic skin with shoes of magnetized alloy, there was no top. One direction was the same as another, as with a fly walking on a chandelier. Yet some primordial impulse drove a man to that position which he considered the top, drove him to stand with his feet pointed toward the Earth and his head toward the outer reaches where the stars moved.

Walking under these conditions was difficult, so Morgan moved with care. The feet could easily tread ahead of the man without his knowing it, or they could lag behind. A slight unthinking motion could detach the shoes from the satellite, leaving the man floating free, unable to return. So

Morgan moved with care, keeping the telephone line clear with one hand.

When he reached the others, Morgan stopped and looked around. The sight always gave him pause. It was not pretty; rather, it was harsh and garish like the raucous illumination of a honkytonk saloon. The black was too black, and the stars burned too white. Everything appeared sharp and hard, with none of the softness seen from the Earth.

Morgan stared, and his lips curled back over his teeth. The anticipation inside him grew greater. No sound and fury here; the menace was of a different sort. Looming, quietly foreboding, it was everywhere.

Morgan leaned back to look overhead, and his lips curled further. This was where it might come, this was the place. Raw space, where a man moved and breathed in momentary peril, where cosmic debris formed arrow-swift reefs on which to founder, where star-born particles traveled at unthinkable speeds out of the macrocosm seeking some fragile microcosm to shatter.

"Sun." Kaufman's voice echoed tinnily inside the helmet. Morgan brought his head down. There, ahead a tinge of deep red edged a narrow segment of the black Earth. The red brightened rapidly, and broadened. Morgan reached to one side of his helmet and dropped a filter into place; he continued to stare at the sun.

McNary said, "Ten minutes to passage."

Morgan unhooked one of the oxygen cylinders at his belt and said, "We need some practice. We'd better try throwing one of these now; not much time left. He turned sideways and made several throwing motions with his right hand without releasing the cylinder. "Better lean into it more than you would down below. Well, here goes." He pushed the telephone line clear of his right side and leaned back, raising his right arm. He began to lean forward. When it seemed that he must topple, he snapped his arm down and threw the cylinder. The recoil straightened him neatly, and he stood securely upright. The cylinder shot out and down in a straight line and was quickly lost to sight.

"Very nice," said McNary. "Good timing. I'll keep mine low too. No sense cluttering the orbits up here with any

more junk." Carefully McNary leaned back, leaned forward, and threw. The second cylinder followed the first, and McNary kept his footing.

Without speaking Kaufman went through the preliminaries and launched his cylinder. Morgan and McNary watched it speed into the distance. "Shooting stars on Earth tonight," said McNary.

"Quick! I'm off." It was Kaufman.

Morgan and McNary turned to see Kaufman floating several feet above the satellite, and slowly receding. Morgan stepped toward him and scooped up the telephone wire that ran to Kaufman's helmet. Kaufman swung an arm in a circle so that it became entangled in the wire. Morgan carefully drew the wire taut and checked Kaufman's outward motion. Gently, so as not to snap the wire, he slowly reeled him in. McNary grasped Kaufman's shoulders and turned him so that his feet touched the metal shell of the satellite.

McNary chuckled and said, "Why didn't you ride an oxygen cylinder down?"

Kaufman grunted and said, "Oh, sure. I'll leave that to the idiots in the movies; that's the only place a man can ride a cylinder in space." He turned to Morgan. "Thanks. Do as much for you some day."

"Hope you don't have to," Morgan answered. "Look, any throwing to be done, you better leave it to Mac and me. We can't be fishing anyone back if things get hot."

"Right," said Kaufman. "I'll do what I can to fend off anything they throw at us." He sniffed. "Be simpler if we have a collision."

Morgan was staring to the left. He lifted a hand and pointed. "That it?"

The others squinted in that direction. After a moment they saw the spot of light moving swiftly up and across the black backdrop of the naked sky. "Must be," said Kaufman. "Right time, right place. Must be."

Morgan promptly turned his back on the sun and closed his eyes; he would need his best vision shortly now, and he wanted his pupils dilated as much as possible. "Make anything out yet?" he said.

"No. Little brighter."

Morgan stood without moving. He could feel the heat on his back as his suit seized the radiant energy from the sun and converted it to heat. He grew warm at the back, yet his front remained cold. The sensation was familiar, and Morgan sought to place it. Yes, that was it—a fireplace. He felt as does a man who stands in a cold room with his back toward a roaring fire. One side toasted, the other side frigid. Funny, the homey sensations, even here.

"Damn face plate." It was Kaufman. He had scraped the front of his helmet against the outside hatch a week ago. Since then the scratches distracted him every time he wore the helmet.

Morgan waited, and the exultation seethed and bubbled and fumed. "Anything?" he said.

"It's brighter," said McNary. "But—wait a minute, I can make it out. They're outside, the three of them. I can just see them."

It was time. Morgan turned to face the approaching satellite. He raised a hand to shield his face plate from the sun and carefully opened his eyes. He shifted his hand into the proper position and studied the other satellite.

It was like their own, even to the three men standing on it, except that the three were spaced farther apart.

"Any sign of a rifle or gun?" asked McNary.

"Not that I see," said Morgan. "They're not close enough to tell."

He watched the other satellite grow larger and he tried to judge its course, but it was too far away. Although his eyes were on the satellite, his side vision noted the bright-lit Earth below and the stars beyond. A small part of his mind was amused by his own stubborn egocentricity. Knowing well that he was moving and moving fast, he still felt that he stood motionless while the rest of the universe revolved around him. The great globe seemed to be majestically turning under his rooted feet. The harsh brilliances that were the stars seemed to sweep by overhead. And that oncoming satellite, it seemed not to move so much as merely swell in size as he watched.

One of the tiny figures on the other satellite shifted its

position toward the others. Sensitive to the smallest detail, Morgan said, "He didn't clear a line when he walked. No telephone. They're on radio. See if we can find the frequency. Mac, take the low. Shorty, the medium. I'll take the high."

Morgan reached to his helmet and began turning the channel selector, hunting for the frequency the Russians were using. Kaufman found it. He said, "Got it, I think. One twenty-eight point nine."

Morgan set his selector, heard nothing at first. Then hard in his ear burst an unintelligible sentence with the characteristic fruity diphthongs of Russian. "I think that's it," he said.

He watched, and the satellite increased in size. "No rifle or any other weapon that I see," said Morgan. "But they *are* carrying a lot of extra oxygen bottles."

Kaufman grunted. McNary asked, "Can you tell if it's a collision course yet? I can't."

Morgan stared at the satellite through narrowed eyes, frowning in concentration. "I think not. I think it'll cross our bow twenty or thirty feet out; close but no collision."

McNary's breath sounded loud in the helmet. "Good. Then we've nothing but the men to worry about. I wonder how those boys pitch."

Another burst of Russian came over the radio, and with it Morgan felt himself slip into the relaxed state he knew so well. No longer was the anticipation rising. He was ready now, in a state of calm, a deadly and efficient calm—ready for the test. This was how it always was with him when the time came, and the time was now.

Morgan watched as the other satellite approached. His feet were apart and his head turned sideways over his left shoulder. At a thousand yards, he heard a mutter in Russian and saw the man at the stern start moving rapidly toward the bow. His steps were long. Too long.

Morgan saw the gap appear between the man and the surface of the other ship, saw the legs kicking in a futile attempt to establish contact again. The radio was alive with quick, short sentences, and the two men turned and began

to work their way swiftly toward the bit of human jetsam that floated near them.

"I'll be damned," said Kaufman. "They'll never make it."

Morgan had seen that this was true. The gap between floating man and ship widened faster than the gap between men and floating man diminished. Without conscious thought or plan, Morgan leaned forward and pulled the jack on the telephone line from McNary's helmet. He leaned back and did the same to Kaufman, straightened and removed his own. He threw a quick knot and gathered the line, forming a coil in his left hand and one in his right, and leaving a large loop floating near the ship in front of him. He stepped forward to clear Kaufman, and twisted his body far around to the right. There he waited, eyes fixed on the other satellite. He crouched slightly and began to lean forward, far forward. At the proper moment he snapped both his arms around to throw the line, the left hand throwing high, the right low. All his sailor's skill went into that heave. As the other satellite swept past, the line flew true to meet it. The floating man saw it coming and grabbed it and wrapped it around his hand and shouted into the radio. The call was not needed; the lower portion of the line struck one of the walking men. He turned and pulled the line into his arms and hauled it tight. The satellite was barely past when the bit of human jetsam was returning to its metallic haven. The two men became three again, and they turned to face the American satellite. As one man the three raised both arms and waved. Still without thinking, Morgan found himself raising an arm with Kaufman and McNary and waving back.

He dropped his arm and watched the satellite shrink in size. The calmness left him, replaced by a small spot of emptiness that grew inside him, and grew and swelled and threatened to engulf him.

Passage was ended, but the taste in his mouth was of ashes and not of glory.

CASEY AGONISTES

by R. M. McKenna

Ted Thomas's hero was a sailor turned spacer; Richard McKenna is a sailor turned writer. "Casey Agonistes" was his first published story, and beyond question the brightest new entry in the s-f field last year.

Born in Idaho in 1913, Mr. McKenna reports a "desert and cowboy-type youth. To Navy, 1931. China Station, 1932. Meant to retire and die out there. . . . Double-crossed by history. . . ." He spent the war years in the Naval Transport Service " . . . all oceans. No decorations", then found himself in 1949 in a Navy Public Information Office in Chicago. " . . . Liked the journalistic word-carpentry. Decided to write some day. S-f, of course, voracious reader thereof from early age. . . ."

In '53, after a cruise to Korea, he was mustered out as Chief Machinist's Mate: ". . . That's steam engines, refrigerators, lathes, etc. Felt lack of formal education keenly. Into U. of North Carolina, summer, 1953." He took a variety of science courses, majored in psychology, and got his B.A. in English Literature in February, 1956. "Married next day. Time out for one year. First dribbles of writing, spring, 1957. Casey first thing sold and published. Age 44 then. . . ."

"Hope to live to 100 and write something every day of it. . . ."

You can't just plain die. You got to do it by the book.

That's how come I'm here in this TB ward with nine other recruits. Basic training to die.

You do it by stages. First a big ward, you walk around and go out and they call you mister. Then, if you got what it takes, a promotion to this isolation ward and they call you charles. You can't go nowhere, you meet the masks, and you get the feel of being dead.

Being dead is being weak and walled off. You hear car

noises and see little doll-people down on the sidewalks, but when they come to visit you they wear white masks and nightgowns and talk past you in the wrong voices. They're scared you'll rub some off on them. You would, too, if you knew how.

Nobody ever visits me. I had practice being dead before I come here. Maybe that's how I got to be charles so quick.

It's easy, playing dead here. You eat your pills, make out to sleep in the quiet hours and drink your milk like a good little charles. You grin at their phony joshing about how healthy you look and feel. You all know better, but them's the rules.

Sick call is when they really make you know it. It's a parade—the head doctor and nurse, the floor nurse Mary Howard and two interns, all in masks and nightgowns. Mary pushes the wheeled rack with our fever charts on it. The doc is a tall skinhead with wooden eyes and pinchnose glasses. The head nurse is fat, with little pig eyes and a deep voice.

The doc can't see, hear, smell or touch you. He looks at your reflection in the chart and talks about you like you was real, but it's Mary that pulls down the cover and opens your pajama coat, and the interns poke and look and listen and tell the doc what they see and hear. He asks them questions for you to answer. You tell them how good you feel and they tell him. He ain't supposed to get contaminated.

Mary's small, dark and sweet and the head nurse gives her a bad time. One intern is small and dark like Mary, with soft black eyes and very gentle. The other one is pink and chubby.

The doc's voice is high and thin, like he ain't all there below decks. The head nurse snaps at Mary, snips at the interns, and puts a kind of dog wiggle in her voice when she talks to the doc.

I'm glad not to know what's under any of their masks, except maybe Mary's, because I can likely imagine better faces for them than God did. The head nurse makes rounds, riding the book. When she catches us out of line, like smoking or being up in a quiet hour, she gives Mary hell.

She gives us hell too, like we was babies. She kind of hints that if we ain't respectful to her and obey her rules

maybe she won't let us die after all.

Christ, how I hate that hag! I hope I meet her in hell.

That's how it struck me, first day or two in isolation. I'd looked around for old shipmates, like a guy does, but didn't see any. On the third day one recognized me. I thought I knew that gravel voice, but even after he told me I couldn't hardly believe it was old Slop Chute Hewitt.

He was skin and bones and his blue eyes had a kind of puzzled look like I saw in them once years ago when a big limey sucker punched him in Nagasaki Joe's. When I remembered that, it made me know, all right.

He said glad to see me there and we both laughed. Some of the others shuffled over in striped bathrobes and all of a sudden I was in like Flynn, knowing Slop Chute. I found out they called the head doc Uncle Death. The fat nurse was Mama Death. The blond intern was Pink Waldo, the dark one Curly Waldo, and Mary was Mary. Knowing things like that is a kind of password.

They said Curly Waldo was sweet on Mary, but he was a poor Italian. Pink Waldo come of good family and was trying to beat him out. They were pulling for Curly Waldo.

When they left, Slop Chute and me talked over old times in China. I kept seeing him like he was on the *John D. Edwards*, sitting with a cup of coffee topside by the after fire-room hatch, while his snipes turned to down below. He wore bleached dungarees and shined shoes and he looked like a lord of the earth. His broad face and big belly. The way he stoked chow into himself in the guinea pullman—that's what give him his name. The way he took aboard beer and samshu in the Kongmoon Happiness Garden. The way he swung the little ne-sans dancing in the hotels on Skibby Hill. Now . . . Godalmighty! It made me know.

But he still had the big jack lantern grin.

"Remember little Connie that danced at the Palais?" he asked.

I remember her, half Portygee, cute as hell.

"You know, Charley, now I'm headed for scrap, the onliest one damn thing I'm sorry for is I didn't shack with her when I had the chance."

"She was nice," I said.

"She was green fire in the velvet, Charley. I had her a few times when I was on the *Monocacy*. She wanted to shack and I wouldn't never do it. Christ, Christ, I wish I did, now!"

"I ain't sorry for anything, that I can think of."

"You'll come to it, sailor. For every guy there's some one thing. Remember how Connie used to put her finger on her nose like a Jap girl?"

"Now, Mr. Noble, you mustn't keep arthur awake in quiet hour. Lie down yourself, please."

It was Mama Death, sneaked up on us.

"Now rest like a good boy, charles, and we'll have you home before you know it," she told me on her way out.

I thought a thought at her.

The ward had green-gray linoleum, high, narrow windows, a spar-color overhead, and five bunks on a side. My bunk was at one end next to the solarium. Slop Chute was across from me in the middle. Six of us was sailors, three soldiers, and there was one marine.

We got mucho sack time, training for the long sleep. The marine bunked next to me and I saw a lot of him.

He was a strange guy. Name of Carnahan, with a pointed nose and a short upper lip and a go-to-hell stare. He most always wore his radio earphones and he was all the time grinning and chuckling like he was in a private world from the rest of us.

It wasn't the program that made him grin, either, like I thought first. He'd do it even if some housewife was yapping about how to didify the dumplings. He carried on worst during sick call. Sometimes Uncle Death looked across almost like he could hear it direct.

I asked him about it and he put me off, but finally he told me. Seems he could hypnotize himself to see a big ape and then make the ape clown around. He told me I might could get to see it too. I wanted to try, so we did.

"He's there," Carnahan would say. "Sag your eyes, look out the corners. He won't be plain at first.

"Just *expect* him, he'll come. Don't want him to do anything. You just *feel*. He'll do what's natural," he kept telling me.

I got where I could see the ape—Casey, Carnahan called him—in flashes. Then one day Mama Death was chewing out Mary and I saw him plain. He come up behind Mama and—I busted right out laughing.

He looked like a bowlegged man in an ape suit covered with red-brown hair. He grinned and made faces with a mouth full of big yellow teeth and he was furnished like John Keeno himself. I roared.

"Put on your phones so you'll have an excuse for laughing," Carnahan whispered. "Only you and me can see him, you know."

Fixing to be dead, you're ready for God knows what, but Casey was sure something.

"Hell, no, he ain't real," Carnahan said. "We ain't so real ourselves any more. That's why we can see him."

Carnahan told me okay to try and let Slop Chute in on it. It ended we cut the whole gang in, going slow so the masks wouldn't get suspicious.

It bothered Casey at first, us all looking at him. It was like we all had a string on him and he didn't know who to mind. He backed and filled and tacked and yawed all over the ward not able to steer himself. Only when Mama Death was there and Casey went after her, then it was like all the strings pulled the same way.

The more we watched him the plainer and stronger he got till finally he started being his own man. He came and went as he pleased and we never knew what he'd do next except that there'd be a laugh in it. Casey got more and more there for us, but he never made a sound.

He made a big difference. We all wore our earphones and giggled like idiots. Slop Chute wore his big sideways grin more often. Old Webster almost stopped griping.

There was a man filling in for a padre came to visitate us every week. Casey would sit on his knee and wiggle and drool, with one finger between those strong, yellow teeth. The man said the radio was a Godsend to us patient spirits in our hour of trial. He stopped coming.

Casey made a real show out of sick call. He kissed Mama Death smack on her mask, danced with her and bit her on

the rump. He rode piggy back on Uncle Death. He even took a hand in Mary's romance.

One Waldo always went in on each side of a bunk to look, listen and feel for Uncle. Mary could go on either side. We kept count of whose side she picked and how close she stood to him. That's how we figured Pink Waldo was ahead.

Well, Casey started to shoo her gently in by Curly Waldo and then crowd her closer to him. And, you know, the count began to change in Curly's favor. Casey had something.

If no masks were around to bedevil, Casey would dance and turn handsprings. He made us all feel good.

Uncle Death smelled a rat and had the radio turned off during sick call and quiet hours. But he couldn't cut off Casey.

Something went wrong with Roby, the cheerful black boy next to Slop Chute. The masks were all upset about it and finally Mary come told him on the sly. He wasn't going to make it. They were going to flunk him back to the big ward and maybe back to the world.

Mary's good that way. We never see her face, of course, but I always imagine for her a mouth like Venus has, in that picture you see her standing in the shell.

When Roby had to go, he come around to each bunk and said good-by. Casey stayed right behind him with his tongue stuck out. Roby kept looking around for Casey, but of course he couldn't see him.

He turned around, just before he left the ward, and all of a sudden Casey was back in the middle and scowling at him. Roby stood looking at Casey with the saddest face I ever saw him wear. Then Casey grinned and waved a hand. Roby grinned back and tears run down his black face. He waved and shoved off.

Casey took to sleeping in Roby's bunk till another recruit come in.

One day two masked orderlies loaded old Webster the whiner onto a go-to-Jesus cart and wheeled him off to x-ray. They said. But later one came back and wouldn't look at us and pushed Webster's locker out and we knew. The masks had him in a quiet room for the graduation exercises.

They always done that, Slop Chute told me, so's not to hurt the morale of the guys not able to make the grade yet. Trouble was, when a guy went to x-ray on a go-to-Jesus cart he never knew till he got back whether he was going to see the gang again.

Next morning when Uncle Death fell in for sick call Casey come bouncing down the ward and hit him a hay-maker plumb on the mask.

I swear the bald-headed bastard staggered. I know his glasses fell off and Pink Waldo caught them. He said something about a moment of vertigo, and made a quick job of sick call. Casey stayed right behind him and kicked his stern post every step he took.

Mary favored Curly Waldo's side that day without any help from Casey.

After that Mama Death really got ugly. She slobbered loving care all over us to keep us from knowing what we was there for. We got baths and back rubs we didn't want. Quiet hour had to start on the dot and be really quiet. She was always reading Mary off in whispers, like she knew it bothered us.

Casey followed her around aping her duck waddle and poking her behind now and again. We laughed and she thought it was at her and I guess it was. So she got Uncle Death to order the routine temperatures taken rectally, which she knew we hated. We stopped laughing and she knocked off the rectal temperatures. It was a kind of unspoken agreement. Casey give her a worse time than ever, but we saved our laughing till she was gone.

Poor Slop Chute couldn't do anything about his big, lop-sided grin that was louder than a belly laugh. Mama give him a real bad time. She arthured the hell out of him.

He was coming along first rate, had another hemorrhage, and they started taking him to the clinic on a go-to-Jesus cart instead of in a chair. He was supposed to use ducks and a bedpan instead of going to the head, but he saved it up and after lights out we used to help him walk to the head. That made his reflection in the chart wrong and got him in deeper with Uncle Death.

I talked to him a lot, mostly about Connie. He said he dreamed about her pretty often now.

"I figure it means I'm near ready for the deep six, Charley."

"Figure you'll see Connie then?"

"No. Just hope I won't have to go on thinking about her then. I want it to be all night in and no reveille."

"Yeah," I said, "me too. What ever become of Connie?"

"I heard she ate poison right after the Reds took over Shanghai. I wonder if she ever dreamed about me?"

"I bet she did, Slop Chute," I said. "She likely used to wake up screaming and she ate the poison just to get rid of you."

He put on his big grin.

"You regret something too, Charley. You find it yet?"

"Well, maybe," I said. "Once on a stormy night at sea on the *Black Hawk* I had a chance to push King Brody over the side. I'm sorry now I didn't."

"Just come to you?"

"Hell, no, it come to me three days later when he give me a week's restriction in Tsingtao. I been sorry ever since."

"No. It'll smell you out, Charley. You wait."

Casey was shadow boxing down the middle of the ward as I shuffled back to my bunk.

It must've been spring because the days were longer. One night, right after the nurse come through, Casey and Carnahan and me helped Slop Chute walk to the head. While he was there he had another hemorrhage.

Carnahan started for help but Casey got in the way and motioned him back and we knew Slop Chute didn't want it.

We pulled Slop Chute's pajama top off and steadied him. He went on his knees in front of the bowl and the soft, bubbling cough went on for a long time. We kept flushing it. Casey opened the door and went out to keep away the nurse.

Finally it pretty well stopped. Slop Chute was too weak to stand. We cleaned him up and I put my pajama top on him, and we stood him up. If Casey hadn't took half the load, we'd'a never got him back to his bunk.

Godalmighty! I used to carry hundred-kilo sacks of cement like they was nothing.

We went back and cleaned up the head. I washed out the pajama top and draped it on the radiator. I was in a cold sweat and my face burned when I turned in.

Across the ward Casey was sitting like a statue beside Slop Chute's bunk.

Next day was Friday, because Pink Waldo made some crack about fish to Curly Waldo when they formed up for sick call. Mary moved closer to Curly Waldo and gave Pink Waldo a cold look. That was good.

Slop Chute looked waxy, and Uncle Death seemed to see it because a gleam come into his wooden eyes. Both Waldos listened all over Slop Chute and told uncle what they heard in their secret language. Uncle nodded, and Casey thumbed his nose at him.

No doubt about it, the ways was greased for Slop Chute. Mama Death come back soon as she could and began to loosen the chocks. She slobbered arthurs all over Slop Chute and fluttered around like women do when they smell a wedding. Casey give her extra special hell, and we all laughed right out and she hardly noticed.

That afternoon two orderly-masks come with a go-to-Jesus cart and wanted to take Slop Chute to x-ray. Casey climbed on the cart and scowled at them.

Slop Chute told 'em shove off, he wasn't going.

They got Mary and she told Slop Chute please go, it was doctor's orders.

Sorry, no, he said.

"Please, for me, Slop Chute," she begged.

She knows our right names—that's one reason we love her. But Slop Chute shook his head, and his big jaw bone stuck out.

Mary—she had to then—called Mama Death. Mama waddled in, and Casey spit in her mask.

"Now, arthur, what is this, arthur, you know we want to help you get well and go home, arthur," she arthured at Slop Chute. "Be a good boy now, arthur, and go along to the clinic."

She motioned the orderlies to pick him up anyway. Casey

hit one in the mask and Slop Chute growled, "Sheer off, you bastards!"

The orderlies hesitated.

Mama's little eyes squinted and she wiggled her hands at them. "Let's not be naughty, arthur. Doctor knows best, arthur."

The orderlies looked at Slop Chute and at each other. Casey wrapped his arms and legs around Mama Death and began chewing on her neck. He seemed to mix right into her, someway, and she broke and run out of the ward.

She come right back, though, trailing Uncle Death. Casey met him at the door and beat hell out of him all the way to Slop Chute's bunk. Mama sent Mary for the chart, and Uncle Death studied Slop Chute's reflection for a minute. He looked pale and swayed a little from Casey's beating.

He turned toward Slop Chute and breathed in deep and Casey was on him again. Casey wrapped his arms and legs around him and chewed at his mask with those big yellow teeth. Casey's hair bristled and his eyes were red as the flames of hell.

Uncle Death staggered back across the ward and fetched up against Carnahan's bunk. The other masks were scared spitless, looking all around, kind of knowing.

Casey pulled away, and Uncle Death said maybe he was wrong, schedule it for tomorrow. All the masks left in a hurry except Mary. She went back to Slop Chute and took his hand.

"I'm sorry, Slop Chute," she whispered.

"Bless you, Connie," he said, and grinned. It was the last thing I ever heard him say.

Slop Chute went to sleep, and Casey sat beside his bunk. He motioned me off when I wanted to help Slop Chute to the head after lights out. I turned in and went to sleep.

I don't know what woke me. Casey was moving around fidgety-like, but of course not making a sound. I could hear the others stirring and whispering in the dark too.

Then I heard a muffled noise—the bubbling cough again, and spitting. Slop Chute was having another hemorrhage and he had his head under the blankets to hide the sound.

Carnahan started to get up. Casey waved him down.

I saw a deeper shadow high in the dark over Slop Chute's bunk. It came down ever so gently and Casey would push it back up again. The muffled coughing went on.

Casey had a harder time pushing back the shadow. Finally he climbed on the bunk straddle of Slop Chute and kept a steady push against it.

The blackness came down anyway, little by little. Casey strained and shifted his footing. I could hear him grunt and hear his joints crack.

I was breathing forced draft with my heart like to pull off its bed bolts. I heard other bedsprings creaking. Somebody across from me whimpered low, but it was sure never Slop Chute that done it.

Casey went to his knees, his hands forced almost level with his head. He swung his head back and forth and I saw his lips curled back from the big teeth clenched tight together. . . . Then he had the blackness on his shoulders like the weight of the whole world.

Casey went down on hands and knees with his back arched like a bridge. Almost I thought I heard him grunt . . . and he gained a little.

Then the blackness settled heavier, and I heard Casey's tendons pull out and his bones snap. Casey and Slop Chute disappeared under the blackness, and it overflowed from there over the whole bed . . . and more . . . and it seemed to fill the whole ward.

It wasn't like going to sleep, but I don't know anything it was like.

The masks must've towed off Slop Chute's hulk in the night, because it was gone when I woke up.

So was Casey.

Casey didn't show up for sick call and I knew then how much he meant to me. With him around to fight back I didn't feel as dead as they wanted me to. Without him I felt deader than ever. I even almost liked Mama Death when she charlesed me.

Mary came on duty that morning with a diamond on her third finger and a brighter sparkle in her eye. It was a little

diamond, but it was Curly Waldo's and it kind of made up for Slop Chute.

I wished Casey was there to see it. He would've danced all around her and kissed her nice, the way he often did. Casey loved Mary.

It was Saturday, I know, because Mama Death come in and told some of us we could be wheeled to a special church hooraw before breakfast next morning if we wanted. We said no thanks. But it was a hell of a Saturday without Casey. Sharkey Brown said it for all of us—"With Casey gone, this place is like a morgue again."

Not even Carnahan could call him up.

"Sometimes I think I feel him stir, and then again I ain't sure," he said. "It beats hell where he's went to."

Going to sleep that night was as much like dying as it could be for men already dead.

Music from far off woke me up when it was just getting light. I was going to try to cork off again, when I saw Carnahan was awake.

"Casey's around somewhere," he whispered.

"Where?" I asked, looking around. "I don't see him."

"I feel him," Carnahan said. "He's around."

The others began to wake up and look around. It was like the night Casey and Slop Chute went under. Then something moved in the solarium. . . .

It was Casey.

He come in the ward slow and bashful-like, jerking his head all around, with his eyes open wide, and looking scared we was going to throw something at him. He stopped in the middle of the ward.

"Yea, Casey!" Carnahan said in a low-clear voice.

Casey looked at him sharp.

"Yea, Casey!" we all said. "Come aboard, you hairy old bastard!"

Casey shook hands with himself over his head and went into his dance. He grinned . . . and I swear to God it was Slop Chute's big, lopsided grin he had on.

For the first time in my whole damn life I wanted to cry.

SPACE-TIME FOR SPRINGERS

by Fritz Leiber

Some people will tell you that Fritz Leiber was born backstage, in the traditional trunk, during the witches' scene in *Macbeth*. This is not true. But he did grow up in an atmosphere of greasepaint and iambic monologue; and he did put in at least one season of Shakespearean barnstorming himself. He also studied for the ministry, acted in Hollywood, taught at a college, worked in a factory, and edited a science magazine. But all that time he was writing, too.

Very few authors are equally successful with fantasy and science fiction. Leiber already had a reputation in *Weird Tales* when, in 1943, two novels of his appeared almost simultaneously in *Astounding* and *Unknown Worlds*. "Gather Darkness" is still generally regarded as one of the best American science-fiction novels; "Conjure Wife" is a modern fantasy with the unique distinction of being the only story that has ever frightened me the third time through.

Two years ago, after a silence of five years, Leiber began writing fiction again. (*HE'S BACK!*, one magazine cover shouted.) Last year, a two-part serial of his in *Galaxy* took the "Hugo" award for best novel of the year at the World Science-Fiction Convention. Most hopeful news we've had this year is that Leiber at last is writing full-time. (Well, almost—just a bit of tournament chess on the side.)

Gummitch was a superkitten, as he knew very well, with an I.Q. of about 160. Of course, he didn't talk. But everybody knows that I.Q. tests based on language ability are very one-sided. Besides, he would talk as soon as they started setting a place for him at table and pouring him coffee. Ashurbani-pal and Cleopatra ate horsemeat from pans on the floor and they didn't talk. Baby dined in his crib on milk from a bottle and he didn't talk. Sissy sat at table but they didn't pour her coffee and she didn't talk—not one word. Father and

Mother (whom Gummitch had nicknamed Old Horsemeat and Kitty-Come-Here) sat at table and poured each other coffee and they *did* talk. Q.E.D.

Meanwhile, he would get by very well on thought projection and intuitive understanding of all human speech—not even to mention cat patois, which almost any civilized animal could play by ear. The dramatic monologues and Socratic dialogues, the quiz and panel-show appearances, the felidological expedition to darkest Africa (where he would uncover the real truth behind lions and tigers), the exploration of the outer planets—all these could wait. The same went for the books for which he was ceaselessly accumulating material: *The Encyclopedia of Odors*, *Anthropofeline Psychology*, *Invisible Signs and Secret Wonders*, *Space-Time for Springers*, *Slit Eyes Look at Life*, et cetera. For the present it was enough to live existence to the hilt and soak up knowledge, missing no experience proper to his age level—to rush about with tail aflame.

So to all outward appearances Gummitch was just a vividly normal kitten, as shown by the succession of nicknames he bore along the magic path that led from blue-eyed infancy toward puberty: Little One, Squawker, Portly, Bumble (for purring not clumsiness), Old Starved-to-Death, Fierso, Loverboy (affection not sex), Spook and Catnik. Of these only the last perhaps requires further explanation: the Russians had just sent Muttник up after Sputnik, so that when one evening Gummitch streaked three times across the firmament of the living room floor in the same direction, past the fixed stars of the humans and the comparatively slow-moving heavenly bodies of the two older cats, and Kitty-Come-Here quoted the line from Keats:

Then felt I like some watcher of the skies
When a new planet swims into his ken;

- it was inevitable that Old Horsemeat would say, “Ah—Catnik!”

The new name lasted all of three days, to be replaced by Gummitch, which showed signs of becoming permanent.

The little cat was on the verge of truly growing up, at least so Gummitch overheard Old Horsemeat comment to Kitty-Come-Here. A few short weeks, Old Horsemeat said, and Gummitch's fiery flesh would harden, his slim neck thicken, the electricity vanish from everything but his fur, and all his delightful kittenish qualities rapidly give way to the earth-bound singlemindedness of a tom. They'd be lucky, Old Horsemeat concluded, if he didn't turn completely surly like Ashurbanipal.

Gummitch listened to these predictions with gay unconcern and with secret amusement from his vantage point of superior knowledge, in the same spirit that he accepted so many phases of his outwardly conventional existence: the murderous sidelong looks he got from Ashurbanipal and Cleopatra as he devoured his own horsemeat from his own little tin pan, because they sometimes were given canned cat-food but he never; the stark idiocy of Baby, who didn't know the difference between a live cat and a stuffed teddy bear and who tried to cover up his ignorance by making goo-goo noises and poking indiscriminately at all eyes; the far more serious—because cleverly hidden—maliciousness of Sissy, who had to be watched out for warily—especially when you were alone—and whose retarded—even warped—development, Gummitch knew, was Old Horsemeat and Kitty-Come-Here's deepest, most secret, worry (more of Sissy and her evil ways soon); the limited intellect of Kitty-Come-Here, who despite the amounts of coffee she drank was quite as featherbrained as kittens are supposed to be and who firmly believed, for example, that kittens operated in the same space-time as other beings—that to get from *here* to *there* they had to cross the space *between*—and similar fallacies; the mental stodginess of even Old Horsemeat, who although he understood quite a bit of the secret doctrine and talked intelligently to Gummitch when they were alone, nevertheless suffered from the limitations of his status—a rather nice old god but a maddeningly slow-witted one.

But Gummitch could easily forgive all this massed inadequacy and downright brutishness in his felino-human household, because he was aware that he alone knew the real truth about himself and about other kittens and babies as

well, the truth which was hidden from weaker minds, the truth that was as intrinsically incredible as the germ theory of disease or the origin of the whole great universe in the explosion of a single atom.

As a baby kitten Gummitch had believed that Old Horsemeat's two hands were hairless kittens permanently attached to the ends of Old Horsemeat's arms but having an independent life of their own. How he had hated and loved those two five-legged sallow monsters, his first playmates, comforters and battle-opponents!

Well, even that fantastic discarded notion was but a trifling fancy compared to the real truth about himself!

The forehead of Zeus split open to give birth to Minerva. Gummitch had been born from the waist-fold of a dirty old terrycloth bathrobe, Old Horsemeat's basic garment. The kitten was intuitively certain of it and had proved it to himself as well as any Descartes or Aristotle. In a kitten-size tuck of that ancient bathrobe the atoms of his body had gathered and quickened into life. His earliest memories were of snoozing wrapped in terrycloth, warmed by Old Horsemeat's heat. Old Horsemeat and Kitty-Come-Here were his true parents. The other theory of his origin, the one he heard Old Horsemeat and Kitty-Come-Here recount from time to time—that he had been the only surviving kitten of a litter abandoned next door, that he had had the shakes from vitamin deficiency and lost the tip of his tail and the hair on his paws and had to be nursed back to life and health with warm yellowish milk-and-vitamins fed from an eyedropper—that other theory was just one of those rationalizations with which mysterious nature cloaks the birth of heroes, perhaps wisely veiling the truth from minds unable to bear it, a rationalization as false as Kitty-Come-Here and Old Horsemeat's touching belief that Sissy and Baby were their children rather than the cubs of Ashurbanipal and Cleopatra.

The day that Gummitch had discovered by pure intuition the secret of his birth he had been filled with a wild instant excitement. He had only kept it from tearing him to pieces by rushing out to the kitchen and striking and devouring a

fried scallop, torturing it fiendishly first for twenty minutes.

And the secret of his birth was only the beginning. His intellectual faculties aroused, Gummitch had two days later intuited a further and greater secret: since he was the child of humans he would, upon reaching this maturation date of which Old Horsemeat had spoken, turn not into a sullen tom but into a godlike human youth with reddish golden hair the color of his present fur. He would be poured coffee; and he would instantly be able to talk, probably in all languages. While Sissy (how clear it was now!) would at approximately the same time shrink and fur out into a sharp-clawed and vicious she-cat dark as her hair, sex and self-love her only concerns, fit harem-mate for Cleopatra, concubine to Ashurbanipal.

Exactly the same was true, Gummitch realized at once, for all kittens and babies, all humans and cats, wherever they might dwell. Metamorphosis was as much a part of the fabric of their lives as it was of the insects'. It was also the basic fact underlying all legends of werewolves, vampires and witches' familiars.

If you just rid your mind of preconceived notions, Gummitch told himself, it was all very logical. Babies were stupid, fumbling, vindictive creatures without reason or speech. What more natural than that they should grow up into mute sullen selfish beasts bent only on rapine and reproduction? While kittens were quick, sensitive, subtle, supremely alive. What other destiny were they possibly fitted for except to become the deft, word-speaking, book-writing, music-making, meat-getting-and-dispensing masters of the world? To dwell on the physical differences, to point out that kittens and men, babies and cats, are rather unlike in appearance and size, would be to miss the forest for the trees—very much as if an entomologist should proclaim metamorphosis a myth because his microscope failed to discover the wings of a butterfly in a caterpillar's slime or a golden beetle in a grub.

Nevertheless it was such a mind-staggering truth, Gummitch realized at the same time, that it was easy to understand why humans, cats, babies and perhaps most kittens were quite unaware of it. How safely explain to a butterfly

that he was once a hairy crawler, or to a dull larva that he will one day be a walking jewel? No, in such situations the delicate minds of man- and feline-kind are guarded by a merciful mass amnesia, such as Velikovsky has explained prevents us from recalling that in historical times the Earth was catastrophically bumped by the planet Venus operating in the manner of a comet before settling down (with a cosmic sigh of relief, surely!) into its present orbit.

This conclusion was confirmed when Gummitch in the first fever of illumination tried to communicate his great insight to others. He told it in cat patois, as well as that limited jargon permitted, to Ashurbanipal and Cleopatra and even, on the off chance, to Sissy and Baby. They showed no interest whatever, except that Sissy took advantage of his unguarded preoccupation to stab him with a fork.

Later, alone with Old Horsemeat, he projected the great new thoughts, staring with solemn yellow eyes at the old god, but the latter grew markedly nervous and even showed signs of real fear, so Gummitch desisted. ("You'd have sworn he was trying to put across something as deep as the Einstein theory or the doctrine of original sin," Old Horsemeat later told Kitty-Come-Here.)

But Gummitch was a man now in all but form, the kitten reminded himself after these failures, and it was part of his destiny to shoulder secrets alone when necessary. He wondered if the general amnesia would affect him when he metamorphosed. There was no sure answer to this question, but he hoped not—and sometimes felt that there was reason for his hopes. Perhaps he would be the first true kitten-man, speaking from a wisdom that had no locked doors in it.

Once he was tempted to speed up the process by the use of drugs. Left alone in the kitchen, he sprang onto the table and started to lap up the black puddle in the bottom of Old Horsemeat's coffee cup. It tasted foul and poisonous and he withdrew with a little snarl, frightened as well as revolted. The dark beverage would not work its tongue-loosening magic, he realized, except at the proper time and with the proper ceremonies. Incantations might be necessary as well. Certainly unlawful tasting was highly dangerous.

The futility of expecting coffee to work any wonders by itself was further demonstrated to Gummitch when Kitty-Come-Here, wordlessly badgered by Sissy, gave a few spoonfuls to the little girl, liberally lacing it first with milk and sugar. Of course Gummitch knew by now that Sissy was destined shortly to turn into a cat and that no amount of coffee would ever make her talk, but it was nevertheless instructive to see how she spat out the first mouthful, drooling a lot of saliva after it, and dashed the cup and its contents at the chest of Kitty-Come-Here.

Gummitch continued to feel a great deal of sympathy for his parents in their worries about Sissy and he longed for the day when he would metamorphose and be able as an acknowledged man-child truly to console them. It was heart-breaking to see how they each tried to coax the little girl to talk, always attempting it while the other was absent, how they seized on each accidentally wordlike note in the few sounds she uttered and repeated it back to her hopefully, how they were more and more possessed by fears not so much of her retarded (they thought) development as of her increasingly obvious maliciousness, which was directed chiefly at Baby . . . though the two cats and Gummitch bore their share. Once she had caught Baby alone in his crib and used the sharp corner of a block to dot Baby's large-domed, lightly downed head with triangular red marks. Kitty-Come-Here had discovered her doing it, but the woman's first action had been to rub Baby's head to obliterate the marks so that Old Horsemeat wouldn't see them. That was the night Kitty-Come-Here hid the abnormal psychology books.

Gummitch understood very well that Kitty-Come-Here and Old Horsemeat, honestly believing themselves to be Sissy's parents, felt just as deeply about her as if they actually were and he did what little he could under the present circumstances to help them. He had recently come to feel a quite independent affection for Baby—the miserable little proto-cat was so completely stupid and defenseless—and so he unofficially constituted himself the creature's guardian, taking his naps behind the door of the nursery and dashing about noisily whenever Sissy showed up. In any case he real-

ized that as a potentially adult member of a felino-human household he had his natural responsibilities.

Accepting responsibilities was as much a part of a kitten's life, Gummitch told himself, as shouldering unsharable intuitions and secrets, the number of which continued to grow from day to day.

There was, for instance, the Affair of the Squirrel Mirror.

Gummitch had early solved the mystery of ordinary mirrors and of the creatures that appeared in them. A little observation and sniffing and one attempt to get behind the heavy wall-job in the living room had convinced him that mirror beings were insubstantial or at least hermetically sealed into their other world, probably creatures of pure spirit, harmless imitative ghosts—including the silent Gummitch Double who touched paws with him so softly yet so coldly.

Just the same, Gummitch had let his imagination play with what would happen if one day, while looking into the mirror world, he should let loose his grip on his spirit and let it slip into the Gummitch Double while the other's spirit slipped into his body—if, in short, he should change places with the scentless ghost kitten. Being doomed to a life consisting wholly of imitation and completely lacking in opportunities to show initiative—except for the behind-the-scenes judgment and speed needed in rushing from one mirror to another to keep up with the real Gummitch—would be sickeningly dull, Gummitch decided, and he resolved to keep a tight hold on his spirit at all times in the vicinity of mirrors.

But that isn't telling about the Squirrel Mirror. One morning Gummitch was peering out the front bedroom window that overlooked the roof of the porch. Gummitch had already classified windows as semi-mirrors having two kinds of space on the other side: the mirror world and that harsh region filled with mysterious and dangerously organized-sounding noises called the outer world, into which grownup humans reluctantly ventured at intervals, donning special garments for the purpose and shouting loud farewells that were meant to be reassuring but achieved just the opposite

effect. The coexistence of two kinds of space presented no paradox to the kitten who carried in his mind the 27-chapter outline of *Space-Time for Springers*—indeed, it constituted one of the minor themes of the book.

This morning the bedroom was dark and the outer world was dull and sunless, so the mirror world was unusually difficult to see. Gummitch was just lifting his face toward it, nose twitching, his front paws on the sill, when what should rear up on the other side, exactly in the space that the Gummitch Double normally occupied, but a dirty brown, narrow-visaged image with savagely low forehead, dark evil wall-eyes, and a huge jaw filled with shovel-like teeth.

Gummitch was enormously startled and hideously frightened. He felt his grip on his spirit go limp, and without volition he teleported himself three yards to the rear, making use of that faculty for cutting corners in space-time, traveling by space-warp in fact, which was one of his powers that Kitty-Come-Here refused to believe in and that even Old Horsemeat accepted/only on faith.

Then, not losing a moment, he picked himself up by his furry seat, swung himself around, dashed downstairs at top speed, sprang to the top of the sofa, and stared for several seconds at the Gummitch Double in the wall-mirror—not relaxing a muscle strand until he was completely convinced that he was still himself and had not been transformed into the nasty brown apparition that had confronted him in the bedroom window.

“Now what do you suppose brought that on?” Old Horsemeat asked Kitty-Come-Here.

Later Gummitch learned that what he had seen had been a squirrel, a savage, nut-hunting being belonging wholly to the outer world (except for forays into attics) and not at all to the mirror one. Nevertheless he kept a vivid memory of his profound momentary conviction that the squirrel had taken the Gummitch Double's place and been about to take his own. He shuddered to think what would have happened if the squirrel had been actively interested in trading spirits with him. Apparently mirrors and mirror-situations, just as he had always feared, were highly conducive to spirit transfers. He filed the information away in the memory cabinet

reserved for dangerous, exciting and possibly useful information, such as plans for climbing straight up glass (diamond-tipped claws!) and flying higher than the trees.

These days his thought cabinets were beginning to feel filled to bursting and he could hardly wait for the moment when the true rich taste of coffee, lawfully drunk, would permit him to speak.

He pictured the scene in detail: the family gathered in conclave at the kitchen table, Ashurbanipal and Cleopatra respectfully watching from floor level, himself sitting erect on chair with paws (or would they be hands?) lightly touching his cup of thin china, while Old Horsemeat poured the thin black steaming stream. He knew the Great Transformation must be close at hand.

At the same time he knew that the other critical situation in the household was worsening swiftly. Sissy, he realized now, was far older than Baby and should long ago have undergone her own somewhat less glamorous though equally necessary transformation (the first tin of raw horsemeat could hardly be as exciting as the first cup of coffee). Her time was long overdue. Gummitch found increasing horror in this mute vampirish being inhabiting the body of a rapidly growing girl, though inwardly equipped to be nothing but a most bloodthirsty she-cat. How dreadful to think of Old Horsemeat and Kitty-Come-Here having to care all their lives for such a monster! Gummitch told himself that if any opportunity for alleviating his parents' misery should ever present itself to him, he would not hesitate for an instant.

Then one night, when the sense of Change was so bursting strong in him that he knew tomorrow must be the Day, but when the house was also exceptionally unquiet with boards creaking and snapping, taps adrip, and curtains mysteriously rustling at closed windows (so that it was clear that the many spirit worlds including the mirror one must be pressing very close), the opportunity came to Gummitch.

Kitty-Come-Here and Old Horsemeat had fallen into especially sound, drugged sleeps, the former with a bad cold, the latter with one unhappy highball too many (Gum-

mitch knew he had been brooding about Sissy). Baby slept too, though with uneasy whimperings and joggings—moonlight shone full on his crib past a window shade which had whirringly rolled itself up without human or feline agency. Gummitch kept vigil under the crib, with eyes closed but with wildly excited mind pressing outward to every boundary of the house and even stretching here and there into the outer world. On this night of all nights sleep was unthinkable.

Then suddenly he became aware of footsteps, footsteps so soft they must, he thought, be Cleopatra's.

No, softer than that, so soft they might be those of the Gummitch Double escaped from the mirror world at last and padding up toward him through the darkened halls. A ribbon of fur rose along his spine.

Then into the nursery Sissy came prowling. She looked slim as an Egyptian princess in her long, thin, yellow nightgown and as sure of herself, but the cat was very strong in her tonight, from the flat intent eyes to the dainty canine teeth slightly bared—one look at her now would have sent Kitty-Come-Here running for the telephone number she kept hidden, the telephone number of the special doctor—and Gummitch realized he was witnessing a monstrous suspension of natural law in that this being should be able to exist for a moment without growing fur and changing round pupils for slit eyes.

He retreated to the darkest corner of the room, suppressing a snarl.

Sissy approached the crib and leaned over Baby in the moonlight, keeping her shadow off him. For a while she gloated. Then she began softly to scratch his cheek with a long hatpin she carried, keeping away from his eye, but just barely. Baby awoke and saw her and Baby didn't cry. Sissy continued to scratch, always a little more deeply. The moonlight glittered on the jeweled end of the pin.

Gummitch knew he faced a horror that could not be countered by running about or even spitting and screeching. Only magic could fight so obviously supernatural a manifestation. And this was also no time to think of consequences,

no matter how clearly and bitterly etched they might appear to a mind intensely awake.

He sprang up onto the other side of the crib, not uttering a sound, and fixed his golden eyes on Sissy's in the moonlight. Then he moved forward straight at her evil face, stepping slowly, not swiftly, using his extraordinary knowledge of the properties of space *to walk straight through her hand and arm as they flailed the hatpin at him*. When his nose-tip finally paused a fraction of an inch from hers, his eyes had not blinked once, and she could not look away. Then he unhesitatingly flung his spirit into her like a fistful of flaming arrows and he worked the Mirror Magic.

Sissy's moonlit face, feline and terrified, was in a sense the last thing that Gummitch, the real Gummitch-kitten, ever saw in this world. For the next instant he felt himself enfolded by the foul, black blinding cloud of Sissy's spirit, which his own had displaced. At the same time he heard the little girl scream, very loudly but even more distinctly, "Mommy!"

That cry might have brought Kitty-Come-Here out of her grave, let alone from sleep merely deep or drugged. Within seconds she was in the nursery, closely followed by Old Horsemeat, and she had caught up Sissy in her arms and the little girl was articulating the wonderful word again and again, and miraculously following it with the command—there could be no doubt, Old Horsemeat heard it too—"Hold me tight!"

Then Baby finally dared to cry. The scratches on his cheek came to attention and Gummitch, as he had known must happen, was banished to the basement amid cries of horror and loathing, chiefly from Kitty-Come-Here.

The little cat did not mind. No basement would be one-tenth as dark as Sissy's spirit that now enshrouded him for always, hiding all the file drawers and the labels on all the folders, blotting out forever even the imagining of the scene of first coffee-drinking and first speech.

In a last intuition, before the animal blackness closed in utterly, Gummitch realized that the spirit, alas, is not the

same thing as the consciousness and that one may lose—sacrifice—the first and still be burdened with the second.

Old Horsemeat had seen the hatpin (and hid it quickly from Kitty-Come-Here) and so he knew that the situation was not what it seemed and that Gummitch was at the very least being made into a sort of scapegoat. He was quite apologetic when he brought the tin pans of food to the basement during the period of the little cat's exile. It was a comfort to Gummitch, albeit a small one. Gummitch told himself, in his new black halting manner of thinking, that after all a cat's best friend is his man.

From that night Sissy never turned back in her development. Within two months she had made three years' progress in speaking. She became an outstandingly bright, light-footed, high-spirited little girl. Although she never told anyone this, the moonlit nursery and Gummitch's magnified face were her first memories. Everything before that was inky blackness. She was always very nice to Gummitch in a careful sort of way. She could never stand to play the game "Owl Eyes."

After a few weeks Kitty-Come-Here forgot her fears and Gummitch once again had the run of the house. But by then the transformation Old Horsemeat had always warned about had fully taken place. Gummitch was a kitten no longer but an almost burly tom. In him it took the psychological form not of sullenness or surliness but an extreme dignity. He seemed at times rather like an old pirate brooding on treasures he would never live to dig up, shores of adventure he would never reach. And sometimes when you looked into his yellow eyes you felt that he had in him all the materials for the book *Slit Eyes Look at Life*—three or four volumes at least—although he would never write it. And that was natural when you come to think of it, for as Gummitch knew very well, bitterly well indeed, his fate was to be the only kitten in the world that did not grow up to be a man.

OR ALL THE SEAS WITH OYSTERS

by Avram Davidson

Kersh, McKenna, Leiber, and (I *think*) Thomas too, set forth the premise that there exists in man a soul, spirit, psyche—call it what you will—separate and independent from his consciousness. Each one of them portrayed the fleeting image of the soul against a different aspect of experience: man-and-nature, man-and-death, man-and-beast.

Now Avram Davidson probes the relationship between man and the products of his own creation. Can a soul (or a consciousness) inhabit a machine?

Since his appearance in the first annual SF, as a new fiction writer of remarkable talent, Mr. Davidson has carved himself a solid niche in both the mystery and s-f fields. Two years ago, he took first prize in the Ellery Queen Mystery Contest. Last year, he won the "Hugo" award for the best short science-fantasy story of the year. This is it. . . .

When the man came into the F & O Bike Shop, Oscar greeted him with a hearty "Hi, there!" Then, as he looked closer at the middle-aged visitor with the eyeglasses and business suit, his forehead creased and he began to snap his thick fingers.

"Oh, say, I know you," he muttered. "Mr.—um—name's on the tip of my tongue, doggone it . . ." Oscar was a barrel-chested fellow. He had orange hair.

"Why, sure you do," the man said. There was a Lion's emblem in his lapel. "Remember, you sold me a girl's bicycle with gears, for my daughter? We got to talking about that red French racing bike your partner was working on—"

Oscar slapped his big hand down on the cash register. He raised his head and rolled his eyes up. "Mr. Whatney!" Mr. Whatney beamed. "Oh, *sure*. Gee, how could I forget?" And we went across the street afterward and had a couple of beers. Well, how you *been*, Mr. Whatney? I guess the bike—

it was an English model, wasn't it? Yeah. It must of given satisfaction or you would of been back, huh?"

Mr. Whatney said the bicycle was fine, just fine. Then he said, "I understand there's been a change, though. You're all by yourself now. Your partner . . ."

Oscar looked down, pushed his lower lip out, nodded. "You heard, huh? Ee-up. I'm all by myself now. Over three months now."

The partnership had come to an end three months ago, but it had been faltering long before then. Ferd liked books, long-playing records and high-level conversation. Oscar liked beer, bowling and women. Any women. Any time.

The shop was located near the park; it did a big trade in renting bicycles to picnickers. If a woman was barely old enough to be *called* a woman, and not quite old enough to be called an *old* woman, or if she was anywhere in between, and if she was alone, Oscar would ask, "How does that machine feel to you? All right?"

"Why . . . I guess so."

Taking another bicycle, Oscar would say, "Well, I'll just ride along a little bit with you, to make sure. Be right back, Ferd." Ferd always nodded gloomily. He knew that Oscar would not be right back. Later, Oscar would say, "Hope you made out in the shop as good as I did in the park."

"Leaving me all alone here all that time," Ferd grumbled.

And Oscar usually flared up. "Okay, then, next time *you* go and leave *me* stay here. See if I begrudge you a little fun." But he knew, of course, that Ferd—tall, thin, pop-eyed Ferd—would never go. "Do you good," Oscar said, slapping his sternum. "Put hair on your chest."

Ferd muttered that he had all the hair on his chest that he needed. He would glance down covertly at his lower arms; they were thick with long black hair, though his upper arms were slick and white. It was already like that when he was in high school, and some of the others would laugh at him—call him "Ferdie the Birdie." They knew it bothered him, but they did it anyway. How was it possible—he wondered then; he still did now—for people deliberately to hurt someone else who hadn't hurt them? How was it possible?

He worried over other things. All the time.

"The Communists—" He shook his head over the newspaper. Oscar offered an advice about the Communists in two short words. Or it might be capital punishment. "Oh, what a terrible thing if an innocent man was to be executed," Ferd moaned. Oscar said that was the guy's tough luck.

"Hand me that tire-iron," Oscar said.

And Ferd worried even about other people's minor concerns. Like the time the couple came in with the tandem and the baby-basket on it. Free air was all they took; then the woman decided to change the diaper and one of the safety pins broke.

"Why are there never any safety pins?" the woman fretted, rummaging here and rummaging there. "There are *never* any safety pins."

Ferd made sympathetic noises, went to see if he had any; but, though he was sure there'd been some in the office, he couldn't find them. So they drove off with one side of the diaper tied in a clumsy knot.

At lunch, Ferd said it was too bad about the safety pins. Oscar dug his teeth into a sandwich, tugged, tore, chewed, swallowed. Ferd liked to experiment with sandwich spreads—the one he liked most was cream-cheese, olives, anchovy and avocado, mashed up with a little mayonnaise—but Oscar always had the same pink luncheon-meat.

"It must be difficult with a baby," Ferd nibbled. "Not just traveling, but raising it."

Oscar said, "Jeez, there's drugstores in every block, and if you can't read, you can at least reckernize them."

"Drugstores? Oh, to buy safety pins, you mean."

"Yeah. Safety pins."

"But . . . you know . . . it's true . . . there's never any safety pins when you look."

Oscar uncapped his beer, rinsed the first mouthful around. "Aha! Always plenny of clothes hangers, though. Throw 'em out every month, next month same closet's full of 'm again. Now whatcha wanna do in your spare time, you invent a device which it'll make safety pins outa clothes hangers."

Ferd nodded abstractedly. "But in my spare time I'm working on the French racer. . . ." It was a beautiful ma-

chine, light, low-slung, swift, red and shining. You felt like a bird when you rode it. But, good as it was, Ferd knew he could make it better. He showed it to everybody who came in the place until his interest slackened.

Nature was his latest hobby, or, rather, reading about Nature. Some kids had wandered by from the park one day with tin cans in which they had put salamanders and toads, and they proudly showed them to Ferd. After that, the work on the red racer slowed down and he spent his spare time on natural history books.

"Mimicry!" he cried to Oscar. "A wonderful thing!"

Oscar looked up interestedly from the bowling scores in the paper. "I seen Edie Adams on TV the other night, doing her imitation of Marilyn Monroe. Boy, oh, boy."

Ferd was irritated, shook his head. "Not that kind of mimicry. I mean how insects and arachnids will mimic the shapes of leaves and twigs and so on, to escape being eaten by birds or other insects and arachnids."

A scowl of disbelief passed over Oscar's heavy face. "You mean they change their *shapes*? What you giving me?"

"Oh, it's true. Sometimes the mimicry is for aggressive purposes, though—like a South African turtle that looks like a rock and so the fish swim up to it and then it catches them. Or that spider in Sumatra. When it lies on its back, it looks like a bird dropping. Catches butterflies that way."

Oscar laughed, a disgusted and incredulous noise. It died away as he turned back to the bowling scores. One hand groped at his pocket, came away, scratched absently at the orange thicket under the shirt, then went patting his hip pocket.

"Where's that pencil?" he muttered, got up, stomped into the office, pulled open drawers. His loud cry of "Hey!" brought Ferd into the tiny room.

"What's the matter?" Ferd asked.

Oscar pointed to a drawer. "Remember that time you claimed there were no safety pins here? Look—whole gah-damn drawer is full of 'em."

Ferd stared, scratched his head, said feebly that he was certain he'd looked there before. . . .

A contralto voice from outside asked, "Anybody here?"

Oscar at once forgot the desk and its contents, called, "Be right with you," and was gone. Ferd followed him slowly.

There was a young woman in the shop, a rather massively built young woman, with muscular calves and a deep chest. She was pointing out the seat of her bicycle to Oscar, who was saying, "Uh-huh" and looking more at her than at anything else. "It's just a little too far forward ("Uh-huh"), as you can see. A wrench is all I need ("Uh-huh"). It was silly of me to forget my tools."

Oscar repeated, "Uh-huh" automatically, then snapped to. "Fix it in a jiffy," he said, and—despite her insistence that she could do it herself—he did fix it. Though not quite in a jiffy. He refused money. He prolonged the conversation as long as he could.

"Well, thank *you*," the young woman said. "And now I've got to go."

"That machine feel all right to you now?"

"Perfectly. Thanks—"

"Tell you what, I'll just ride along with you a little bit, just—"

Pear-shaped notes of laughter lifted the young woman's bosom. "Oh, you couldn't keep up with me! My machine is a *racer*!"

The moment he saw Oscar's eye flit to the corner, Ferd knew what he had in mind. He stepped forward. His cry of "No" was drowned out by his partner's loud, "Well, I guess this racer here can keep up with yours!"

The young woman giggled richly, said, well, they would see about that, and was off. Oscar, ignoring Ferd's outstretched hand, jumped on the French bike and was gone. Ferd stood in the doorway, watching the two figures, hunched over their handlebars, vanish down the road into the park. He went slowly back inside.

It was almost evening before Oscar returned, sweaty but smiling. Smiling broadly. "Hey, what a babel!" he cried. He wagged his head, he whistled, he made gestures, noises like escaping steam. "Boy, oh, boy, what an afternoon!"

"Give me the bike," Ferd demanded.

Oscar said, yeah, sure; turned it over to him and went to

wash. Ferd looked at the machine. The red enamel was covered with dust; there was mud spattered and dirt and bits of dried grass. It seemed soiled—degraded. He had felt like a swift bird when he rode it. . . .

Oscar came out wet and beaming. He gave a cry of dismay, ran over.

"Stand away," said Ferd, gesturing with the knife. He slashed the tires, the seat and seat cover, again and again.

"You crazy?" Oscar yelled. "You outa your mind? Ferd, no, don't, Ferd—"

Ferd cut the spokes, bent them, twisted them. He took the heaviest hammer and pounded the frame into shapelessness, and then he kept on pounding till his breath was gasping.

"You're not only crazy," Oscar said bitterly, "you're rotten jealous. You can go to hell." He stomped away.

Ferd, feeling sick and stiff, locked up, went slowly home. He had no taste for reading, turned out the light and fell into bed, where he lay awake for hours, listening to the rustling noises of the night and thinking hot, twisted thoughts.

They didn't speak to each other for days after that, except for the necessities of the work. The wreckage of the French racer lay behind the shop. For about two weeks, neither wanted to go out back where he'd have to see it.

One morning Ferd arrived to be greeted by his partner, who began to shake his head in astonishment even before he started speaking. "How did you *do* it, how did you *do* it, Ferd? Jeez, what a beautiful job—I gotta hand it to you—no more hard feelings, huh, Ferd?"

Ferd took his hand. "Sure, sure. But what are you talking about?"

Oscar led him out back. There was the red racer, all in one piece, not a mark or scratch on it, its enamel bright as ever. Ferd gaped. He squatted down and examined it. It *was* his machine. Every change, every improvement he had made, was there.

He straightened up slowly. "Regeneration . . ."

"Huh? What say?" Oscar asked. Then, "Hey, kiddo, you're all white. Whad you do, stay up all night and didn't

get no sleep? Come on in and siddown. But I still don't see how you done it."

Inside, Ferd sat down. He wet his lips. He said, "Oscar—listen—"

"Yeah?"

"Oscar. You know what regeneration is? No? Listen. Some kinds of lizards, you grab them by the tail, the tail breaks off and they grow a new one. If a lobster loses a claw, it regenerates another one. Some kinds of worms—and hydras and starfish—you cut them into pieces, each piece will grow back the missing parts. Salamanders can regenerate lost hands, and frogs can grow legs back."

"No kidding, Ferd. But, uh, I mean: Nature. Very interesting. But to get back to the bike now—how'd you manage to fix it so good?"

"I never touched it. It regenerated. Like a newt. Or a lobster."

Oscar considered this. He lowered his head, looked up at Ferd from under his eyebrows. "Well, now, Ferd . . . Look . . . How come all broke bikes don't do that?"

"This isn't an ordinary bike. I mean it isn't a real bike." Catching Oscar's look, he shouted, "Well, it's *true*!"

The shout changed Oscar's attitude from bafflement to incredulity. He got up. "So for the sake of argument, let's say all that stuff about the bugs and the eels or whatever the hell you were talking about is true. But they're alive. A bike ain't." He looked down triumphantly.

Ferd shook his leg from side to side, looked at it. "A crystal isn't, either, but a broken crystal can regenerate itself if the conditions are right. Oscar, go see if the safety pins are still in the desk. Please, Oscar?"

He listened as Oscar, muttering, pulled the desk drawers out, rummaged in them, slammed them shut, tramped back.

"Naa," he said. "All gone. Like that lady said that time, and you said, there never are any safety pins when you want 'em. They disap— Ferd? What're—"

Ferd jerked open the closet door, jumped back as a shoal of clothes hangers clattered out.

"And like *you* say," Ferd said with a twist of his mouth,

"on the other hand, there are always plenty of clothes hangers. There weren't any here before."

Oscar shrugged. "I don't see what you're getting at. But anybody could of got in here and took the pins and left the hangers. *I* could of—but I didn't. Or *you* could of. Maybe—" He narrowed his eyes. "Maybe you walked in your sleep and done it. You better see a doctor. Jeez, you look rotten."

Ferd went back and sat down, put his head in his hands. "I *feel* rotten. I'm scared, Oscar. Scared of what?" He breathed noisily. "I'll tell you. Like I explained before, about how things that live in the wild places, they mimic other things there. Twigs, leaves . . . toads that look like rocks. Well, suppose there are . . . things . . . that live in people places. Cities. Houses. These things could imitate—well, other kinds of things you find in people places—"

"*People* places, for crise sake!"

"Maybe they're a different kind of life-form. Maybe they get their nourishment out of the elements in the air. You know what safety pins *are*—these other kinds of them? Oscar, the safety pins are the pupa-forms and then they, like, *hatch*. Into the larval-forms. Which look just like coat hangers. They feel like them, even, but they're not. Oscar, they're not, not really, not really, not . . ."

He began to cry into his hands. Oscar looked at him. He shook his head.

After a minute, Ferd controlled himself somewhat. He snuffled. "All these bicycles the cops find, and they hold them waiting for owners to show up, and then we buy them at the sale because no owners show up because there aren't any, and the same with the ones the kids are always trying to sell us, and they say they just found them, and they really did because they were never made in a factory. They grew. They grow. You smash them and throw them away, they regenerate."

Oscar turned to someone who wasn't there and waggled his head. "Hoo, boy," he said. Then, to Ferd: "You mean one day there's a safety pin and the next day instead there's a coat hanger?"

Ferd said, "One day there's a cocoon; the next day there's

a moth. One day there's an egg; the next day there's a chicken. But with . . . these it doesn't happen in the open daytime where you can see it. But at night, Oscar—at night you can *hear* it happening. All the little noises in the nighttime, Oscar—”

Oscar said, “Then how come we ain't up to our belly-button in bikes? If I had a bike for every coat hanger—”

But Ferd had considered that, too. If every codfish egg, he explained, or every oyster spawn grew to maturity, a man could walk across the ocean on the backs of all the codfish or oysters there'd be. So many died, so many were eaten by predatory creatures, that Nature had to produce a maximum in order to allow a minimum to arrive at maturity. And Oscar's question was: then who, uh, eats the, uh, coat hangers?

Ferd's eyes focused through the wall, buildings, park, more buildings, to the horizon. “You got to get the picture. I'm not talking about real pins or hangers. I got a name for the others—‘false friends,’ I call them. In high school French, we had to watch out for French words that looked like English words, but really were different. ‘*Faux amis*,’ they call them. False friends. Pseudo-pins. Pseudo-hangers . . . Who eats them? I don't know for sure. Pseudo-vacuum cleaners, maybe?”

His partner, with a loud groan, slapped his hands against his thighs. He said, “Ferd, Ferd, for *crise* sake. You know what's the trouble with you? You talk about oysters, but you forgot what they're good for. You forgot there's two kinds of people in the world. Close up them books, them bug books and French books. Get out, mingle, meet people. Soak up some brew. You know what? The next time Norma—that's this broad's name with the racing bike—the next time she comes here, *you* take the red racer and *you* go out in the woods with her. I won't mind. And I don't think she will, either. Not *too* much.”

But Ferd said no. “I never want to touch the red racer again. I'm afraid of it.”

At this, Oscar pulled him to his feet, dragged him protestingly out to the back and forced him to get on the French machine. “Only way to conquer your fear of it!”

Ferd started off, white-faced, wobbling. And in a moment was on the ground, rolling and thrashing, screaming.

Oscar pulled him away from the machine.

"It threw me!" Ferd yelled. "It tried to kill me! Look—blood!"

His partner said it was a bump that threw him—it was his own fear. The blood? A broken spoke. Grazed his cheek. And he insisted Ferd get on the bicycle again, to conquer his fear.

But Ferd had grown hysterical. He shouted that no man was safe—that mankind had to be warned. It took Oscar a long time to pacify him and to get him to go home and into bed.

He didn't tell all this to Mr. Whatney, of course. He merely said that his partner had gotten fed up with the bicycle business.

"It don't pay to worry and try to change the world," he pointed out. "I always say take things the way they are. If you can't lick 'em, join 'em."

Mr. Whatney said that was his philosophy, exactly. He asked how things were, since.

"Well . . . not *too* bad. I'm engaged, you know. Name's Norma. Crazy about bicycles. Everything considered, things aren't bad at all. More work, yes, but I can do things all my own way, so . . ."

Mr. Whatney nodded. He glanced around the shop. "I see they're still making drop-frame bikes," he said, "though, with so many women wearing slacks, I wonder they bother."

Oscar said, "Well, I dunno. I kinda like it that way. Ever stop to think that bicycles are like people? I mean, of all the machines in the world, only bikes come male and female."

Mr. Whatney gave a little giggle, said that was *right*, he had never thought of it like that before. Then Oscar asked if Mr. Whatney had anything in particular in mind—not that he wasn't always welcome.

"Well, I wanted to look over what you've got. My boy's birthday is coming up—"

Oscar nodded sagely. "Now here's a job," he said, "which you can't get it in any other place but here. Specialty of the

house. Combines the best features of the French racer and the American standard, but it's made right here, and it comes in three models—Junior, Intermediate and Regular. Beautiful, ain't it?"

Mr. Whatney observed that, say, that might be just the ticket. "By the way," he asked, "what's become of the French racer, the red one, used to be here?"

Oscar's face twitched. Then it grew bland and innocent and he leaned over and nudged his customer. "Oh, *that* one. Old Frenchy? Why, I put *him* out to stud!"

And they laughed and they laughed, and after they told a few more stories they concluded the sale, and they had a few beers and they laughed some more. And then they said what a shame it was about poor Ferd, poor old Ferd, who had been found in his own closet with an unraveled coat hanger coiled tightly around his neck.

TEN-STORY JIGSAW

by Brian W. Aldiss

The wider range and subtler definition of subject matter in modern s-f makes, I think, for better reading—but much more complex anthologizing.

Time was when the editor of a collection such as this could sit down and sort out the stories into tidy piles under such subheadings as *Space Travel*, *Time Travel*, *Planetary Adventure*, *Marvelous Invention*, *Alien Visitors*, *Mutation*, *Atom Doom*, and the like.

Presumably this could still be done. The space ships, inventions, and mutations are still there—but that's not what the stories are about. The end result would be only to multiply confusion. If I used subheadings here, the two main ones would have to be: *Whither Civilization?* and *Inside Man*.

One of the old labels would still fit, though—*Atom Doom*—and the next three stories could be grouped under it. The first of them is the work of a young British author who has only recently begun to appear in print in this country.

The time: After World War III.

The place: Sydney, Australia.

The hero: A junkman.

My name is Badger Gowland. It's an ordinary sort of name for an ordinary sort of bloke. For the past twenty years I've worked as scrap merchant in this big, war-torn city. The city happens to be Sydney, but I suppose that, with minor variations, what I'm going to tell you might have happened in any war-torn city: Singapore, New York, Hamburg, Moscow, London. In that twenty years, I've come across many strange stories, but the strangest is that of Tosher Ten-Toes. Tosher was my cobbler. Here's his story, and you'll have to take it as it is, without frills.

This particular morning, the last morning of Tosher's life, there was something vague about him. He was preoccupied.

I spotted it even in the way he came toward me when he came to work, but thought nothing of it at the time. His amnesia made him like that at times, and all the lads were used to it and thought nothing of it.

"Come on, Tosher!" I shouted. "The other scrap gangs have already left. Time we were moving."

I was seated in the heli-cart, waiting to go. He scrambled up beside me apologetically. I let in the clutch, the vanes began to spin above us and up we went. Heli-carts are absolutely silent in action; we might have been birds, the way we took the air.

It was a fine, warm spring day with air as still as syrup, just the sort of day for our job. The enemy raid over the city the night before had been chicken feed—a paltry couple of satellite-to-Earth squadrons of Depressors dropping a few "suitcases." "Suitcases" are what we call the light type of H-bombs that Depressors generally carry: small stuff equivalent to not more than eighty thousand tons T.N.T. The best thing about them from our point of view is that they're clean—no R.A. fall-out—and so we don't have the bother of cluttering ourselves with anti-suits while we are salvaging.

Directly the raid was over, I had phoned through to Civil Maintenance and bought a couple of freshly damaged ten-story buildings cheap. They stood fairly close together on George's Heights, looking out across Obelisk Bay and the sea. I slid the co-ordinates into the cyberpilot now and we were away. Tosher pulled his wind-cheater off and stowed it in the locker, just to show he was all set for action.

In the sunshine, the city looked good from the air. Neat. Even the beggars starving in the gutters look tidy when you're a couple of hundred yards up. A bright, early-flowering weed lent a touch of gaiety to the craters among the buildings. The waters of the port shone like brass.

"What have we got today, Badger?" Tosher asked.

"A tenner with courtesy and a jigsaw tenner," I said. Those are just the cant terms we use in the trade. A building "with courtesy" means some sort of Government office block—if you get courtesy from them, you get precious little else. A "jigsaw" is private flats or homes; we call

them that because when they are busted open they look like a pattern of interlocking pieces—like a smashed dolly house.

In no time we were circling over our new property. Good slices of both of them were still standing. Far below, the demolition squads were busy roping off the area. They always move in and blow up the unsafe buildings after we have paid our brief salvage visits. "The vultures" is what they call us; I won't tell you what we call them. They grudge us an honest living. Yet what we scrap lads pay the civic authorities pays those chaps' wages. Besides, with all raw materials in short supply owing to the war, we are valuable members of the community—all that sort of bunk!

"My turn for out," Tosher said, casting round for his gear.

I had leveled out close to the ten-story jigsaw, holding the helicart steady against the ruined top floor. We always work from the top down. And we always do the jigsaws first because they are more exciting; you never know what you're going to find. In a courtesy job, it's all cut and dried: so many desks, so many wash basins, so many lavatory bowls. After a time, a good scrap man—like me or Tosher—can fillet a courtesy with our eyes shut.

Anyhow, Tosher strapped his tool haversack on his back, slung one end of the pulley system over his shoulder, and stepped out onto the upper story of the doomed building. I climbed out the back of my cab into the helicart platform and set up the other end of the pulley tackle. By that means, we transfer the booty into our flying pantechnicon.

Then I sat back, lit a mescahale, and waited for Tosher to reconnoiter and do his stuff. I forgot to tell you why we call him Tosher Ten-Toes.

It started as a joke. The war had hardly begun, nine years ago, when Tosher appeared near my house in a dazed condition. Nothing on but pants and vest and half a shirt; barefoot. Speechless. Total amnesia. There were a lot of poor devils about like that when the raids started. I was short of hands in the yard at the time; my missus and I took Tosher in and looked after him. Tosher Ten-Toes was what the kids called him. You know what kids are:

they think it's funny to see a man walk barefoot down Portobello Street.

Tosher began to get better. I got busier as the raids increased. In no time, he was off the yard and working second man in the heliarts. Now for the last four years he was my right-hand man. He might not have had a lot to say, but I wouldn't have changed him for all the you-know-what in China. He still did not know who he was, but that began to trouble him less and less. Nothing of the old days had come back to him, except the memory of Judy. Not that Tosher knew who Judy was, it was just that he used to wake up in the night crying her name. He was faithful to her name, wouldn't look at another woman, not even at Kate, who often looked at him.

Fixing up his end of the pulley, he stood and surveyed the ruined jigsaw. It was in a poor way. Half of it had been sliced into dust, and the foundations were undermined. Spreading his legs, Tosher began to rock from side to side; as he gained momentum, the building began to rock from side to side with him. He killed the motion at once. "Thank heaven there's no wind about," he said to himself.

He was standing in what had been till a few hours ago an attic box-room. Against the inner wall, four empty trunks were piled. Without bothering to use the pulley system, he threw them over into the hold of the heliart. Nobody had the raw materials to waste on making trunks now; they were scarce and would be worth about six hundred apiece.

Without wasting any time, but moving cautiously, he went to the door and opened it. Outside were stairs, winding down to the floor below. A quarter way down, just past the first bend, the outer wall had been blasted away, leaving the stairs sagging over emptiness. Stepping carefully on the inside of the treads, Tosher came down onto the next floor.

All the walls on the landing were intact—curtains undisturbed round the landing window, just a little white dust over the ornament on the sill. No doubt Tosher felt that feeling you always feel, that you've no right to be there, that you're an intruder, or a burglar, or perhaps a vulture, or a ghost.

Ahead of him, a notice on a door said "Flat 26." The door was locked. Tosher brought out a bunch of skeleton keys, undid it, and went in.

He was in a living room. Everything was perfectly intact. It was the usual sort of middle-class flat; we deal with them by the dozen. Tosher made a rapid inventory of the salable items: stove, TV, tape player, carpet, newish suite, clock, nice little china figure. The rest of the stuff, the paperbacks, yesterday's newspaper, the pictures on the wall, a big golliwog slumped over the arm of a chair, would tumble with the jigsaw when the demolition men took over. Later, maybe, kids would crawl over the rubble and pull a comic or a little toy out of it.

"Something like twenty-five thousand credits here," Tosher estimated, jotting the figure down and opening the next door.

He was in the bathroom. It was a nice, roomy bathroom with green tiles all round it and a deep ebony bath and pink and yellow towels on towel rails and a great big airing cupboard. You know. A bit Ritzy. The sort of place that makes you hanker after a bath yourself.

One wall had entirely fallen away. Tosher walked to the edge of the precipice and looked down. The bathroom protruded over space, with only the breezes for support. Obviously, he need not waste much time there.

And then, the way I see it, something came over Tosher. Perhaps he suddenly saw in that bathroom the complete futility of war. He thought of everyone who had been killed, from Vic Shepherd, the great comedian, to the lowliest unknown; he thought even of Norton Sykes, the minister they called The Man Who Started It All, whose hideout had ironically been the first to be destroyed in the war he began—perhaps even of my sister Kate, who at one time set out in a practical way to get Judy out of Tosher's mind and later was killed by a Winged Wallaby, so-called.

Tosher must have seen it all in that bathroom: the way in war you're busy doing something ordinary one minute and the next—bingo!—you're in Kingdom Come. Norton Sykes crouching over his battle plans or my sister Kate hanging out her smalls—when the time comes, they all go

like that. That's how it had been in the bathroom too. A nice place and a nice life spoilt forever.

The little glass shelf over the wash basin was cluttered with powder tins, shaving tackle, tooth brushes, and other paraphernalia. On the stool next to the black bath were a child's pajamas. There was water in the bath; on the water floated a becalmed yacht and two rubber ducks.

It all told its own story. Death comes at bedtime—it sounds like the title of a cheap novel. Everything there looked perfectly in order, except that the big airing-cup-board door was partly open and a woolly bath towel had fallen out; and a tooth glass had teetered off the shelf and shattered in the wash basin. But with the outer wall gone, all those indoor objects looked unreal in the outdoor lighting, as if they were something on a tele or a movie set.

Then Tosher saw another detail. On the edge of the lino, by the sheer drop, was a bloody hand print. The fingers pointed into the room. The print was smudged where the hand had slid over the edge and into the gulf. It had been just a small hand. "My God!" Tosher said.

You could picture it all. Mother about to bath son. Water in the bath and everything. "I think I'd better wash your hair tonight, dear." Then the Depressors pulling out of their two-hundred-mile dive and screeching off, leaving their suitcases behind. The detonation, and the wall whipped away like a curtain. Blast probably sucked mother out with the wall. Son was bowled to the brink of the ninety-foot drop. He was injured. For a minute he clung there, body dangling in air, perhaps not even struggling to get back to safety.

He hung there and looked at the old order, the soft, warm towels, his little pajamas, the steam rising from the tub. Then he had to let go.

Tosher turned wildly. He began cursing aloud. He cursed the war that killed the kid and blotted out Judy and his own past; he cursed Norton Sykes, who started the war; he cursed the generals who continued the war; he even cursed me, who made a profit out of the war. Then he cursed himself most of all.

He wrenched a crowbar out of his kit and smashed the

mirror on the wall so that he could no longer see his own distorted face. He flicked the plug out of the bath; the water gurgled out, splashing over a piano standing forlornly on a ledge which had once been the floor below. Then he hurled the crowbar away.

He watched the metal glint as it fell lazily over and over, finally to strike the pavement far below; and when he turned back, the towel by the cupboard door was moving.

For a minute Tosher did not understand. Then the towel was dragged aside. A woman was there on the floor, on her hands and knees. Clutching the door, she stood up. She was in her early forties, disheveled, still with a waterproof apron tied round her middle. It was the boy's mother. The blast, flinging her into the airing cupboard, had knocked her senseless, and there she had lain till the row Tosher made had roused her.

The sight of her petrified Tosher for a minute.

"I thought you were a ghost!" he said hoarsely.

The woman brushed a hand over her forehead.

"Why aren't you in the bath yet, Mickie?" she asked in a puzzled fashion.

"It's all right now, you're safe now," he said, recovering from his first fright. "We'll soon have you out of here."

Her gaze went right through him.

"The bath water's getting cold while you just stand there," she said.

"You're a bit dazed, my dear," said Tosher, in a gentle voice. "Here, look, let me—"

"I asked you to get undressed, didn't I?" she said. She sounded rational enough, but her eyes—they were as black as prunes and stared unseeingly through Tosher. "Hurry up and get your clothes off, Mickie, or the water will be stone cold."

"I'm not your little boy," Tosher said. "Something—something's happened. Try and understand. Let me take care of you."

"Don't argue, Mickie," she said sharply. "Get undressed quickly. It's nearly time for Daddy to come home."

"Mickie isn't here!" Tosher explained desperately. "I've come to get you out of this, old pet."

"You must have your bath first," she shouted. There was a bruise on her temple like mud under the skin where she had clouted herself against the airing-cupboard door. "It's getting late," she said.

"Can't you *see*—" Tosher began, gesturing to the little yacht lying on its side in the bath. But he knew she could not understand; the poor creature was not rational.

If he could get her upstairs, the heli-cart would take her to hospital for treatment. Advancing he laid a hand on the woman's wrist. With unexpected force, she flung herself onto him. She pounced like a wild cat and began to rip the clothes off his back.

"Get undressed! Get undressed!" she yelled. "You must have your bath, you dirty little scamp!"

Tosher staggered back, putting his hand up to her throat to push her off him. With a quick movement, she bit his fingers till the blood came.

"Into the bath!" she screamed. "Quick! Quickly! Your ducks and boats are waiting for you!"

Under the prod of pain, Tosher acted instinctively. He chopped her under the nose with the edge of his palm and then, when her head was still jerked backward, pushed hard against her chest. She came away from him.

"Your bath . . ." she began surprisedly.

Just for a moment she was balanced on the brink of the drop. Tosher stepped forward to grab her. Their fingers touched. Then she was falling backward, outward, her mouth fixed in an astonished, silent, "Oh!"

Helplessly, Tosher just stood there and watched her fall. Her round mouth and her puzzled expression—as if this were some problem she could solve, given another five minutes—were vividly clear to him. And in that instant he recognized her.

"Judy!" he called. Just that one call.

And the round mouth of her, fixed, dwindling in the center of his vision, changed suddenly into an expanding hole, growing rounder, bigger, bigger yet. It was swallowing, vaporizing away the barrier that stood between Tosher and his past. The sight of Judy had finally vanquished his nine-year amnesia.

Standing there on the edge of nothing, Tosher could at last see back into his lost life. A figure was standing there. It was Norton Sykes, The Man Who Started It All, the man who had vanished when the first load of enemy suitcases fell on his hideout. Tosher recognized Norton's figure: it was himself.

"Me . . . Norton . . ." he muttered and then, aloud in an odd conversational tone, "but I don't want to be Norton."

And he took a pace forward into thin air.

Most of this I saw with my own two eyes. Directly I heard Tosher breaking the mirror, I guessed something was wrong. In rocky jigsaws, we scrap chaps are always as silent as mice.

All I had to do was drop the heli-cart down one story and angle it round one corner. I did it in a hurry, and the pulley system snagged me. In my haste, I had forgotten it still connected me with the attic.

Rather than flip the crate up again to disconnect, I snatched up my welder and jumped back onto the platform to burn the steel pulley cable through and thus release the heli-cart. It took a hell of a time. The welder wouldn't function properly and my hands were shaking as if I had palsy.

I was stuck half round the corner, helpless. I could see Tosher and the woman from where I was, but couldn't get to them. I shouted, but they didn't look. When the cable finally gave, I was just too late to catch Tosher as he fell.

The terrible thing was, that woman wasn't Judy any more than I am. I checked afterward. It was just a delusion of poor old Tosher's. But of course he was—or had been—Norton Sykes. I'd found that out years ago. All the boys in the yard knew, but they never let on. Nor did they ever hold it against him, although as Norton Sykes, Tosher had been a virtual dictator.

It's an odd world. A dictator can make a damn good scrap man. And vice versa, unfortunately.

FRESH GUY

by E. C. Tubb

Another Britisher presents what you might call a double-doom story—set in a graveyard, around the tombstone that marks the underground retreat of the war-torn remnants of humanity. Mankind dug under long ago; but the scent of fresh-turned dirt is present still—appetizingly, for some.

Sammy was playing knucklebones on The Tombstone when the vampire arrived. As a vampire he obviously had a lot to learn. Sammy had heard him, recognized him for what he was and had dismissed him as a possible danger long before the stranger stumbled into the light of the tiny fire which Sammy tended. Even when he finally arrived Sammy paid him no attention, concentrating instead on his game, rolling the five scraps of bone with easy familiarity.

He was good at the game, having had much time in which to practice, and he took a quiet pride in the skillful manner he tossed and snatched, flipped and caught, spun and held the knucklebones. He ended the game by throwing them high into the air, catching them on the back of his hand. It was a broad, shovel-like hand with stubby fingers, thick, strong nails and well-developed muscles.

"Not bad, eh?" Sammy flipped the bones again, letting them bounce down the back of his hand and trapping them neatly between his fingers. He looked up, grinning at the stranger.

"What?" The vampire, a pale, distraught young character was obviously out of his depth. He wore a faded khaki shirt and pants, a pair of cracked and mildewed boots and a baffled expression. "What did you say?"

"I said 'Not bad, eh?'" Sammy rolled the bones lovingly between his palms. "I bet that you couldn't handle them like that."

"I don't suppose I could," admitted the stranger. He ran the tip of his tongue over his lips. "Do you mind if I join you?"

"Help yourself." Sammy waved to a spot opposite him across the fire. "Glad of company." He rolled his bones again and stared moodily into the fire.

The stranger stared too. He seemed to be struggling with some private burden for twice he attempted to speak and changed his mind at the last moment. He squinted towards Sammy but the fire was low and the light was bad and all he could make out was a formless blur. Finally he coughed and got to the heart of what was worrying him.

"Look," he said. "My name is Smith, Edward Smith, and I seem to be in some sort of trouble. I wonder if you could help me?"

"Everyone's in some sort of trouble," said Sammy feelingly. "What's your particular brand?"

"Well," said Smith urgently, "something seems to have happened to me." He passed a wavering hand across his forehead. "This may sound crazy to you but I seem to be living in some weird kind of dream."

"Do tell," said Sammy, he was interested. Casually he flipped the knucklebones into a pocket of the tattered old jacket he wore. "What makes you think that?"

"Everything." Smith frowned as he tried to collect his thoughts. "I was sick, I remember that well enough what with Uncle screaming about doctor's bills and the price of medicine and how he was having trouble getting in the harvest because I couldn't help him and how he'd have to hire a man and who was going to pay for it?" Smith took a deep breath.

Sammy nodded, picking idly at his teeth. "I follow."

"I was as sick as a dog," corrected Smith feelingly. "I guess I would have died if it hadn't been for some queer old coot of a doctor Uncle dug up from somewhere or other. He was cheap, I guess, otherwise I wouldn't have had him but he had a smell like he'd been out in the rain and hadn't dried off properly."

"And he only came after dark," said Sammy. "Right?"

"How did you know?" Smith blinked in surprise. "Maybe you know him, is that it?"

"I could take a guess," said Sammy. He picked at his teeth again. "Then what happened?"

"I don't know," Smith was genuinely baffled. "I must have passed out, I guess, because the next thing I know I was in a hole in the ground on the side of a hill. I had a cramp something cruel so I yelled for help but no one could have heard me because no one came to see what was wrong." He frowned again. "And that's another queer thing. When I finally managed to get out of the hole and take a look round I couldn't find a thing. The farm was gone, the road all grown over, everything had changed." He shook his head and stared bleakly into the fire. "So I'm either dreaming or crazy."

"You might be crazy," said Sammy. "I wouldn't argue about that, not knowing you well enough to form an opinion, but you're not dreaming, that's for sure."

"I must be," said Smith; he didn't seem to like the idea that he was crazy. "All this is a stupid mixed-up nightmare. It must be."

Sammy didn't bother to argue. He merely reached out and gently pinched Smith on the thigh. Smith screamed and rolled beside the fire, nursing his leg and whimpering with pain.

"Still think that you're dreaming?" asked Sammy pleasantly.

"No," said Smith wildly. "But if I'm not dreaming then I'm crazy. I'm just a poor, crazy madman, that's what."

"Crazy you might be but a man you are not," said Sammy. Smith jerked up his head.

"Not a man?" His voice rose a little. "Then what am I?"

"A vampire."

"A *what!*"

"A vampire."

"Now I know who is crazy." Smith forgot about his leg. "All that guff is for the birds. Superstitious rubbish! Old wives' tales! Nonsense, all of it!"

Sammy shrugged.

"Well, it is," insisted Smith weakly. He brooded for a long time. "All right," he said finally. "I'll ride along with what you say. So I'm a vampire." He leaned forward, triumph glinting in his eyes. "But if I'm a vampire what does that make you?"

"A ghoul," said Sammy. He threw some dried twigs on the fire, blinking in the sudden flare of light.

"Satisfied?" Sammy sucked reflectively at a tooth as the light died.

"I don't know." Smith had been shaken by the sight. "You're either the most deformed human I've ever seen or you aren't human at all."

"I'm not human," admitted Sammy patiently. "I told you that. I'm a ghoul."

"Incredible!" Smith shook his head. "I simply can't believe it."

Sammy grunted and rolled over on to his back. His ears twitched a little, he was listening to the sounds of something moving in the woods.

"It's not that I'm calling you a liar," said Smith. "I wouldn't want you to think that, but the whole thing's so crazy!" He shook his head as if it hurt a little. "And another thing. I must have walked for miles; if I hadn't seen your fire I'd have stumbled around all night, and in all that time I haven't seen or heard a soul. Not even a dog. Where is everyone?"

"Around," said Sammy vaguely. He suddenly caught on to what Smith meant. "Oh, you mean *humans!*" He stabbed a finger downward toward the overgrown concrete slab of The Tombstone. "At a guess I'd say they are about half a mile down."

"All of them?"

"All that are left. In this part of the world anyway, I wouldn't know about over the oceans." He stared at the young man's expression. "Didn't you know?"

"No." Smith was breathing fast from the top of his chest. "What happened?"

"The Big Bang." Sammy grimaced. "The thing everyone knew would happen, said they didn't want to happen, yet made happen anyway." Speculation narrowed his eyes.

"Say, just when were you buried, anyway?"

"I fell sick in 1960," said Smith, dodging the leading question. Sammy pursed his lips in a soundless whistle.

"That accounts for it. The Big Bang came a couple of years later and they certainly made a good job of it. A better job than the embalmer did on you or you wouldn't be sitting there now."

"Embalmer?" Smith looked blank. "I don't get it. Are you sure that you know what you're talking about?"

"Listen," snapped Sammy, he was getting annoyed. "I may look a little odd, to you at least, but I'm no dumbbell. I can read fifteen languages and speak twenty more and once I went to school; spent most of a year there before I had to leave."

"Why?"

"It was a medical school," said Sammy shortly. "What I'm getting at is that I know what happened to you. If the embalmer had done a better job you would have died for real. And even then you were lucky; your folks must have cut corners when they planted you. Otherwise you wouldn't have been washed out at the right time."

"Uncle Silas was always a tight-wad," admitted Smith. "He fancied himself at carpentry too." He fell silent, thinking. "I guess that all this must be real then." He chuckled. "Me, a vampire! Well, what do you know?" A thought suddenly wiped the smile from his face. "Say! If you're a ghoul—" He swallowed. "What I mean is that ghouls are supposed to—well, aren't they?"

"Forget it," said Sammy. "We've a Gentleman's Agreement, neither touches the other."

"Well!" Smith dabbed at his forehead. "That's a relief. You had me worried for a while about that."

Sammy didn't answer; he was busy listening to the stealthy approach of a visitor. Smith, now that the sounds were loud enough for even his dull hearing to catch, stiffened in sudden alarm.

"Say, what's that?"

"Relax," said Sammy, setting an example. "It's just one of the boys."

"Who?" Smith seemed anxious.

"Who?" Sammy gave a grin. "Well, now," he said deliberately. "At a guess I'd say that it was your pappy." He was always one for a joke.

Boris was of the old school, a tall, thin, cadaverous vampire who believed that the old traditions should be maintained. He came striding out of the woods, his cloak swirling around him, his monocle gleaming red in the reflected light. He sat beside the fire, warming his thin, almost transparent hands, then nodded to Smith.

"Who's the new one?"

Sammy chuckled. He had seen the expression on Smith's face and now awaited the denouement.

"I know you," suddenly blurted Smith. "You're the doctor who attended me when I was sick."

"That's right," said Sammy. "Boris, meet your son. Smith, meet your Pop."

"He's not my father," denied Smith. "Anyway, my old man died way back in a car crash."

"Your new father for your new rebirth," explained Sammy. "Boris infected you when he snatched your blood. If it hadn't been for him you wouldn't be here now so, in a way, he's your Pop." He became serious. "It's the only way vampires can breed, you know, they depend on their victims to perpetuate their race."

"And ghouls?" said Smith shrewdly. "What about them?"

"Like humans," said Sammy shortly. He didn't want to talk about it. Neither, it appeared, did Boris want to discuss his new offspring.

"Lupe here yet?" He shivered a little and drew closer to the fire. Sammy shook his head.

"He'll be along."

"I hope we have better luck this time." Boris sucked at his bloodless lips. "Seven years now we've been waiting and still no sign of them coming out." He looked suddenly panic-stricken. "Could they be all dead?"

"Lupe said that he could hear sounds the last time," reminded Sammy. "And we know they took care to stock up well on supplies."

"But something could have happened." Boris was a natural pessimist. "Maybe something went wrong with

their water supply, or they took a bug down there with them and it wiped them out." He began to chew at his nails as he thought about it. "And they're the only ones we know of."

"Take it easy," said Sammy; he was becoming infected with the other's doubts. "They'll be all right, I know they will." He changed the subject. "Anything new?"

"Nothing." Boris hunched closer to the fire, his evening dress, dirt-stained but still retaining a traditional dignity, giving him the appearance of an old and slightly moth-eaten aristocrat. "I've covered a pretty wide area and haven't seen a thing. I guess that we're the last, Sammy, you and me and Lupe, and we're not going to last much longer unless they come out from under The Tombstone pretty soon."

"Don't forget me, Pop," said Smith. "I'm one of the boys now." He grinned at Boris's expression. "What's the matter, Pop? Touch you on the raw?"

"I am not used to being addressed as 'Pop,'" said Boris with simple dignity. "And don't kid yourself that you are something special. Why, I remember the time when young pups like you were ten a penny. And a lot of trouble they caused too, back in the old days. Made life very hectic for a while."

"That's because you weren't organized," said Smith brusquely. "Now, take me. I'm modern with modern ideas of how to go about things. You've got to be organized to get anywhere in this world." He stared disdainfully at Boris's garment. "Take you now, dressed up like a Continental Count playing a bit part in some crummy production."

"I am a Count," said Boris in a strangled voice.

"Maybe you were," said Smith airily, "but who wants Counts? What counts now is the front you put on. Dress like big money, talk like big money and, brother, you'll get big money." He beamed in self-satisfaction. "Believe me, I know."

"What's the good of money," said Sammy from the shadows. "It can't buy you anything, not now."

"It will." Smith was confident in his own knowledge of

the human race. "And the smart ones are those who get in on the ground floor."

Boris grunted in disgust; he was a quiet old vampire who believed in keeping himself to himself and not making enemies. It was a system of life which had stood him in good stead in the past and he saw no reason to change just because some young squirt thought he knew it all. He gave a dry laugh at the prospect of deflating the young vampire. Sammy spoilt his fun. "Better tell Smith what he has to know," he said. "After all, you owe it to him in a way."

"I owe him nothing," snorted the old vampire. "What has he ever done for me?"

"You want me to answer that?" Smith grew annoyed as he thought about it. It wasn't that he objected too much to his new status but the principle behind it annoyed him. He was firm in his belief of the paradox of free enterprise and the sanctity of property, especially private property, and Boris had successfully pulled off a very personal theft. And there was nothing he could do about it.

"Tell him, Boris," said Sammy again. "You owe it to the lad."

"You don't have to tell me anything," snapped Smith. He expanded his chest. "I've read a bit and I know what the score is. I know what to eat and know that I've to return to my grave before dawn." Suddenly he looked haggard. "My grave! Hell! I'd never be able to find it again in a month of Sundays!"

Boris snorted with amused contempt. "That's for the comic books," he said. "All that guff about returning to our graves before dawn, I mean. All that's necessary is that you stay out of sunlight; the actinic rays will trigger off skin cancers. Artificial light's all right but nothing containing ultra violet."

"That so?" Smith looked relieved. "Anything else you should tell me while you're at it?"

"Only to respect your elders," snapped Boris. "And don't get careless or you'll wind up with a stake through the heart or a bullet through the ribs. And it needn't be a silver bullet either." He broke off as an animal howled from the darkness.

"Here's Lupe," said Sammy happily, and threw more twigs on the fire.

A big, sleek Alsatian-like dog loped into the firelight, sat down and promptly changed into a man. Even in human form he retained a slightly wolf-like air. He nodded to the others.

"Hi! How's tricks?"

"I'm starving," grumbled Boris.

"So am I." Sammy belched wind and rubbed his stomach. "I've been living off my fat for so long now that soon I'll be too weak to take a bite if I had the chance." He looked hopefully at the werewolf. "Any news?"

"Wife's had a new litter," said Lupe proudly. "Three boys and two girls." He beamed at their congratulations. "Things aren't as easy as they might be but I'm making out." He lifted a foot and scratched himself behind one ear. He noticed Smith's boggle-eyed stare. "New boy?"

"Just born," said Sammy. "Boris was responsible for him."

"Congratulations," said Lupe politely to the old vampire. "How's he shaking down?"

"Well, he hasn't gone crazy on us yet," said Sammy thoughtfully.

Boris changed what was, to him, obviously a painful subject. "Any other news?"

"The rabbits are getting more plentiful," said Lupe.

"Rabbits!" Boris screwed up his mouth. Sammy echoed his sentiments.

"Rabbits might be good eating for you, Lupe, but not for us. Anything else?"

"I don't think so." The werewolf frowned. "There was just one more thing, now I come to think about it, but it's slipped my mind." He waved a hand. "Never mind, I guess it'll come back if it was important." He returned to the subject closest to his heart. "I wish you could see the youngsters; fine kids, all of them."

"You're breeding fast," said Sammy enviously. "Sure you aren't going a little too fast?"

"I don't think so." Lupe scratched the other ear. "I'm keeping the litters down as low as I can but we daren't get

too low. Anyway, all our troubles will be over when they come out."

"You can say that again," said Sammy with real feeling. He smacked his lips. "Hell, I never thought that I'd miss humans so much."

"Nor me," said Boris fervently. "Why, once in the old days when they were pressing close I even wished a plague on them." He sighed. "Right now I could do with the old days, stakes, garlic, silver bullets and all. Modern times were a gift, sure, but look how things wound up."

They nodded, even Smith, all agreeing that the human race had hardly played fair.

"When they come out," said Sammy thoughtfully, "we'll have to take things easy. Treat them gently and give them a chance to breed."

"That's right," agreed Lupe. "Build up the supply before we can let loose the demand. Personally, though, I'm not worried too much. My guess is that they wouldn't have taken many dogs down under The Tombstone with them or, if they did, then they'd have to restrict them to the limit. Anyway, they'd welcome a change." He bared his teeth, concentrated, and changed into a handsome pseudo-Alsatian. He was grinning as he resumed human form. "See what I mean?"

"Humans were always suckers for dogs," said Boris enviously. "I've often wondered why you just didn't move right in and take over."

"Why should we?" Lupe shook his head at the vampire's ignorance. "No need to kill the goose, you know. They never suspected us, not after the Middle Ages, and many a human has worked himself silly to support us in luxury." He scowled. "When I think of how many of us got caught in the Big Bang—!"

"We all got caught in it." Sammy kicked at the fire.

The rest nodded, agreeing with Sammy all the way. Smith didn't say anything. He was still a little confused and more than inclined to think he was in a dream. But fantastic as everything seemed it all made a peculiar kind of sense. Ghouls, vampires and werewolves were, obviously, very real. Divergent branches of human stock, perhaps, ultra

specialists who had become utterly dependent on the human race for their sustenance. Lupe and his kind had adapted best of all but, in the final essence, they were all parasites. He too, now he came to think of it; and suddenly he was very conscious of their concern over the survival of the few humans left beneath The Tombstone.

Parasites cannot live without a host.

Lupe stretched himself, yawned, and rose to his feet. "Well," he said, "I guess that we'd better get on with it." Changing to animal form he began to run over the cracked, overgrown expanse of the slab of cadmium concrete which was The Tombstone. Nose to the ground, tail waving, he looked every inch a splendid specimen of the canine species. Even Smith, who knew better, had to restrain a desire to call to him so that he could pat his head.

"What's he doing?" he asked.

"Checking up," said Sammy. "Lupe's got sharper senses than we have and he's finding out whether or not they are still moving around down there." He held up his hand for silence. "Watch him!"

Lupe looked over his shoulder, grinned, then vanished behind a clump of scrub. When he reappeared he was in human shape.

"I think I've got something," he called. "Scent's pretty strong by this ventilator."

"They coming out?" Sammy sprang to his feet, his strong legs carrying him over to the werewolf. "Are they?"

"Can't tell." Lupe altered his shape again and sniffed around some more, finally cocking his head and resting one furry ear against a barely visible crack in the concrete. He concentrated so hard that even his tail stopped wagging.

"Dawn'll be here soon," whispered Boris. He shivered and drew his ragged cloak around him. "Another day in the mud."

"How do you arrange it?" said Smith. Like Boris he kept his voice low. "I guess that you could just cover yourself with that cloak and you'd be safe. Is that why you wear it?"

"It has its uses," said Boris ambiguously. He glared at the young vampire with an active dislike. "Listen," he warned, "just because I was responsible for you being here doesn't

mean that I've got to wet-nurse you. Life's tough enough without that."

"Who wants you to wet-nurse anyone?" Smith returned the glare. "From what I can see you're just an old-fashioned has-been. Walking around with that cloak as if you were some Count or something. Why didn't you get a plastic cover like they used to cover automobiles with? You could fold that up small and have a regular tent at day-times."

"Smart guy," sneered Boris. "That's the trouble with you young pups, always think you know better than your elders. I'd look fine walking about with a tent on my back now, wouldn't I? Maybe you'd better learn that people like us have to practice camouflage all the time. One slip and—!" He made a suggestive gesture. "It's happened before, you know."

"In comic books," admitted Smith. "But who believes in vampires now?"

"And what's the reason for that?" Boris tightened his thin mouth. "Camouflage, of course, what else? Same as humans don't believe in Sammy and his kind, but how long would it take them to figure it out? So maybe they'd think you was sick in the head and lock you away in an asylum, but what then? They wouldn't feed you the right diet and they'd keep you there for a long, long time. And you'd die there, make no mistake about that." He shuddered. "It happened to a friend of mine."

"Old-fashioned, that's what you are." Smith appealed to Sammy. "You can see that, can't you? You're educated and—"

"Pipe down!" interrupted Sammy. He felt all on edge as he always did when Lupe came to make one of his periodic check-ups. His hunger had mounted until it was a fire in his stomach and his nerves were like harp strings. Restlessly he got to his feet and wandered over to where the werewolf was sniffing the ground.

"They're still alive," said Lupe. He'd changed again and stood, breathing deeply, his chest and forehead covered with sweat. "Hell, I'm all in!"

"Come and sit down." Sammy led the way back to the

fire, knowing of the demands that shape-changing made on Lupe's energy sources. The werewolf sagged as he slumped beside the blaze.

"I could smell them," he said after a while. "Scent's stronger than it was and it's my guess that they are moving upward."

"On their way out?" Hope flamed in the old vampire's eyes. "Is that it, Lupe?"

"Could be." Lupe relaxed still more. "From the sounds I'd say that they are moving heavy equipment toward the surface. Maybe one of their tunnels got blocked and they have to clear it. That or they aren't too sure what conditions are like up here and don't want to take any chances." He grinned. "Anyway, they're still safe."

The others grinned with him.

"You know," said Smith thoughtfully, "this needs careful planning." He threw another twig on the fire. "Very careful planning."

"Meaning?" Sammy stared dully into the fire. Lupe had gone; he'd rested for a short while and then, resuming animal form for fast travel, had loped off back to his wife and new litter. Sammy felt more depressed than usual after he had gone. It must be nice to be able to return to a family. He wished he had one of his own.

"Well," said Smith, "if Lupe knows his business then the humans are on their way out. When they do finally come out, we'll have to contact them, right?"

"That's right." Sammy fought down the hunger which thought of all those humans living and dying down below always aroused. Once he had tried digging down toward them but had had to give up in despair. That had been during one of his desperate periods.

"So who is going to be the contact." Smith glanced at Sammy. "You?"

"Why not?" Boris was quick to defend his friend.

"Why not?" Smith shrugged. "Look at him, that's why not."

"Sammy's held down jobs with humans before."

"In the old days, maybe, but there were plenty of freaks walking around then. Those days are over."

"Let's not get personal about this," snapped Sammy. "What's on your mind?"

"I'm a modern man," said Smith. "At least, I was a modern man and I know how they think. Those humans down there know that the surface was blasted with radiation. If Sammy turns up they'll think that he's a mutation or something. They've bred true down there and they aren't going to want mutations around at any price. So they'll shoot him." He spread his hands. "Well," he said defensively. "How can you argue about it? Sammy doesn't look human, does he?"

"Go on," gritted Sammy. He clamped his teeth together, hating Smith for the first time. Fresh guy!

"So that rules out Sammy," continued Smith. It was obvious that he had given the matter some thought. "That leaves me and Boris." He shrugged. "I guess that we needn't even consider Boris."

"Why not?" The old vampire was hurt.

"Because you look a freak too, that's why." Smith was brutally frank. "Let's face it, fellows, neither of you would get to first base."

"And you would, I suppose?" Sammy was sarcastic.

"Sure." Smith had an iron hide, sarcasm didn't reach him. "I'm young and I know what the score is. I could talk my way into their confidence and be accepted."

"And what about us?"

"Oh, I'd take care of you somehow." Smith didn't meet Sammy's eyes. "I'd try to sneak Boris here a drink or two and fix it so that you got something to eat now and again. Things will be hard at first, naturally, but I'll do my best."

"Fresh young pup!" Boris ground his teeth in anger. "No respect for your elders at all! Why I—"

"Hold it!" Sammy sprang to his feet, then relaxed as Lupe bounded into the firelight. "Trouble?"

"No." Lupe grunted as he forced his tired body back into human shape. "Wish that I didn't have to do this every time I wanted to talk." He looked at Sammy. "It's just that I remembered what it was I had to tell you. I bumped into someone you'd be interested in a short while ago. She's living in a cave way south of here, in a place where they

used to hang their dead, the humans, I mean. You know it?"

"I know it." Sammy felt excitement warm his blood. "I thought that area had been cleaned out long ago."

"Maybe it was, but she's there now and from what I could see she's making out fine." Lupe winked. "I told her about you and she's interested. Young too." He dropped to all fours. "And lonely." He began to change shape. "Well, just thought that you'd be interested." Abruptly he was gone, a sleek shape bounding through the brush.

Sammy stared after him, too thrilled to shout his thanks. A girl ghoul! Almost he had given up hope of ever finding a female of his own kind but, if Lupe was telling the truth, and he was, then there was something to be gained in life even yet. He sagged at a sudden thought.

The caves were a long way away and he hadn't eaten for too long. Travel took energy and he just didn't have the energy. Smith looked enviously at the ghoul as he slumped beside the fire.

"Lucky devil," he said. "I wish I could get a girl."

"You have to make your own," said Sammy dully.

Boris frowned. "What's wrong with you, Sammy? That was good news. You're going, of course?"

"How can I?" Sammy sighed from the pit of his stomach. "Radiations sterilize, remember, and I can't eat sterile food. Around here it wasn't so bad, that's how I've managed to live this long, but I can't hope to pick up anything decent to eat on so long a journey." He slumped still more. "I'm too weak to chance it." He sighed again. "If I could only get one really decent meal to set me up, I'd be off like a shot. Just one good meal."

"Tough," said Smith carelessly. "Still, maybe she'll wait."

"Hold your tongue!" snapped Boris. He glanced at Sammy, then at Smith, then at Sammy again. Nervously he wet his lips. "There's one way," he said suggestively.

"There's the Agreement," reminded Sammy. He'd already thought of what Boris had in mind and dismissed it because of that.

"We're a quorum," pointed out Boris. "We could agree to suspend the Agreement for just this once." He became urgent. "Be sensible, Sammy. The way things are the two

of us wouldn't stand a chance to survive until they come out. From what Lupe said it might take another year and those Red Cross stocks are mostly smashed and useless. And when they do come out, what then?"

"Geometrical progression," said Sammy understandingly. "Two makes four and four makes eight and—"

"He's young," said Boris. "That means that he'll have a hell of an appetite. He won't be able to use discretion, he hasn't had the experience. And you heard what he said about contacting them. What's the betting that he just cuts us out?"

"What are you talking about?" Smith glanced from one to the other. They ignored him.

"I'm not sure," said Sammy slowly. "We've got to stick together now or we'll all be sunk."

"We'll be sunk anyway," said Boris. "He'll foul things up for sure." His hand closed pleadingly on Sammy's arm. "Please, Sammy. Just for this once."

"What are you two freaks talking about?" snapped Smith again. Youth and confidence in his superiority made him contemptuous of these old has-beens. Sitting beside the fire he had made his own plans and they didn't include either of the others. He lost both confidence and contempt as he read Sammy's expression. "No!" he screamed, understanding hitting like a thunderbolt. "No! You wouldn't! You couldn't! You—"

He rose together with Sammy and, turning, raced into the dark safety of the woods. He didn't get far.

Fresh guys rarely do.

THE BEAUTIFUL THINGS

by Arthur Zirul

A story about bears—but no Goldilocks.

Like Mrs. Emshwiller, Professor Bone, and Patent Attorney Thomas, Arthur Zirul has been writing and publishing s-f, on a part-time basis, for the last five years or so. As with them, s-f was favorite reading for him long before he tried writing it. "Science fiction to me," he says, "is the last, and likely the only, refuge for genuine satire . . . the biting kind only fantasy can provide."

Mr. Zirul's more usual, workaday refuge is an out-of-the-way back building in Greenwich Village which he describes as "1,500 square feet of a former night club, filled with fine dust, a dozen assorted machines, shelves full of very odd odds and ends, and me (I'm the one that's moving)."

Sorry. No *Things* or *Shottlebops* or *genii-jars*. He calls it *Diorama Studios*, and builds industrial models there.

Last spring season, just before the Forest Council was about to disband in search of mates, I introduced a Bill to provide funds for a sanctuary for Man. A place where men would be able to live unmolested, and where they would create beautiful things for us. I have become convinced that we Bears cannot make the beautiful things; we have no feeling for it. Only Man seems to have this divine ability. When I told the Elders of the Council of my thoughts they scoffed and asked what had made a Bruin of my rank even consider such fantastic ideas.

I told them of how I had captured a man last winter near the ruins of the Great City. I had kept him alive, over the objections of my hungry cubs, when I discovered that he could make the beautiful things. I told them of how my family had learned to appreciate the delicate art of my man and had gained great pleasure from it. I was certain that other Bears would also be benefited if they had the

opportunity to obtain similar works of art.

The Elders said nothing until I showed them samples of my man's work. They then roared with displeasure and said that Bears had no need for such frivolities. Bears had need only for the stout club and the sharp fang. The things my man had made, they said, were born of the same dark thoughts that had led to the destruction of Mankind by the Thunder Gods.

At the mention of the sacred Gods the Elders bowed their heads reverently. It is written, in the Holy Books found in the Great City, that the Thunder Gods destroyed the cities of men because of their sinful ways. They leveled their cities with the Fires That Burned Forever, the same fires which had given the Bears the ability to think, and to use their paws like hands. This was done so that we might inherit the Earth. The Elders believed that it was the God-given mission of the Bears to destroy the remnants of Mankind and *not* to perpetuate its follies. They could not support my proposal.

Their blind dogmatism, and their refusal to pursue my thoughts any further angered me to a point where I challenged the Council thusly: at the next session of the Council I would present much more conclusive proof that man can create beautiful, important, things for us. If, after due consideration, the Elders found my proof convincing then they must open a state sanctuary; otherwise, if they refused to give me even this opportunity to prove my theory, they must be prepared to meet my wrath in the mating arena.

The Elders of the Council sat in deep thought for a while, rubbing their backs on the thick trees that ringed the Council clearing. A Prince's challenge, such as mine, cannot be taken lightly. They asked me how I intended to obtain this conclusive proof I spoke of. I told them that I would open a sanctuary, at my own expense, where men would make the beautiful things for me. I was certain that many men working together, under my protection, could create much greater things than my lone slave is able to do. Things that would convince the Elders of Man's ability. The Elders muttered among themselves for some time but they finally agreed to my proposal; with the condition that they should

not be expected to reimburse me for my experiments if my proposal was not adopted.

I agreed to their condition and proceeded to carry out my plans the very next day. I unearthed the greater part of my wealth and spent it wildly in a frenzy to have my project begun. First I bought an old den on the property of my neighbor. I ordered it cleared of its bones and refuse and be made ready for habitation. While the cave was being readied I set out to capture a group of humans to occupy it. I organized a hunting party. Beaters were sent out first; they flushed the humans from their holes in the ground and into the open. The men were fleet of foot and soon outran us but we were able to catch one female, too heavy with child to run. We used her as the bait. The beaters prodded her with sharp sticks to make her cry out. Humans are very curious by nature and after a while some of them returned to see what the noise was about. We captured six men this way quite easily and were forced to kill only one of them, a young one, who had thrown himself like a crazed dog at my head beater. I was sorry to have lost him but I received a good price for his carcass from the butcher.

I had the humans brought to the sanctuary where I managed to explain, using the clumsy pidgin that we speak to humans with, that I wanted them to create beautiful things for me. Things such as their ancestors had created, with skill and feeling, in the old days. Those beautiful things that, in cold materials, had expressed the flaming souls of their creators for all to see, and to admire, and to stand in awe of. . . . The Beautiful Things. I did not let them see samples of my man-slave's work as I did not wish them to blindly copy those things which the Council had not liked in the first; I urged them to use their God-gift to create new and better things.

At first the humans appeared to be frightened at my words. Then they were incredulous, finally they were overjoyed to discover that they were not going to be tortured or eaten but were, instead, to be given an opportunity to preserve themselves and their art under my protection. One of the men explained eagerly that he had been taught to make the beautiful things by his father, who in turn had learned

it from his father, who had been a great artist in the days before the wars. I was delighted. The man claimed to be able to create things much more beautiful than anything I had ever seen. Foolishly, I accepted him at his word and put him in charge.

I ordered that the humans be supplied immediately with all the materials they requested, no matter what the cost. Soon heaps of materials began to be delivered to the den. Most of the things I could not understand the need for. There were fats and oils, color pigments dug from the river bank and squeezed from herbs, logs of wood, and pieces of the hard flint from the mountains. They had even asked for white cloth, but of course, that was unobtainable. When they had all their supplies they asked to be let alone, and be allowed to work without outside distractions. I agreed reluctantly, but I made them promise that they would work as quickly as possible as I was very impatient to prove my theory.

For weeks the men worked in silence, all through the hot, still summer and into the first days of fall. I began to fear that they would have nothing ready to show me before the first snows fell and the Council reconvened. I would not be able to feed them forever. My impatience made me suspect that they were malingering, trying to keep the soft berth I had given them as long as possible. When the first chill winds began to sweep the leaves from the trees, I sent word to the den that I would be kept waiting no longer. I insisted on seeing their creations immediately.

My heart pounded fiercely as I approached the sanctuary. I envisioned a new world opening for my race. A world filled with the beautiful things that Man would create for us. As I entered the den, however, my breath caught in my throat. I could not believe my senses when I saw what the men had done. Those . . . those *thieves* had betrayed me! Their leader, the one who claimed to have had the art in him, stood in the center of the cave, his hands and arms were stained with color. He sneered at me in that simpering way men have of displaying their teeth as he showed me what they had been doing for the past months, at my expense.

The walls were covered with ridiculous scribbings that looked like the outlines of men and bears when seen against the moon and were smeared over with oily colors. They showed me bits of wood that had been hacked with the flint tools they had made so that they looked like the shapes of men and bears, but smaller. They showed me scribbings they had drawn on the inside of sheets of bark. Their leader explained that it was called writing and that it would be very helpful to my people.

"What have you done?" I roared. "What is all this . . . this dung? Where are all the beautiful things you promised me?"

"B-but," the leader whined, his eyes wide as he held up a piece of the carved wood. "Here they are. We created them for you as our ancestors created them for themselves."

"Leech!" I screamed. "You have the gall to call these knots beautiful?" I flung the statue from me so that it smashed against the wall. I snatched the latest creation of my man-slave from my belt. "Here!" I roared, holding it aloft. "Here is what I want!"

I brought the sharp, singing edge down swiftly into the throat of the trembling fool.

"This is a beautiful thing!" I bellowed in a voice that shook the cave as I flung the dripping dagger into the center of the room.

The firelight glinted in flashes of beautiful fire from the polished steel blade of the dagger and from its keen, hair-line edge. We Bears simply do not have the ability to match such exquisite workmanship in the clumsy stone things we make.

That is why I plead not to exterminate the few men left in the world. If there was an error in my plan it lay only in incorrect experimentation. I claim what every true scientist knows. One incorrect experiment does not rule out an entire hypothesis. My theory is sound and must not be disregarded. We must seek out those men who can make the beautiful things and we must conserve them and train them to produce those things for us. Things like those lovely, shining knives that are so light to carry and kill so easily—or perhaps something even better.

THE COMEDIAN'S CHILDREN

by Theodore Sturgeon

There is very little remaining to be said by any editor or anthologist about Theodore Sturgeon, whose stories have been so thoroughly collected and so assiduously introduced that every scrap of biographical information has been worked thin.

And I have found, in the course of introducing my own share of Sturgeoniana, that his stories are seldom susceptible to summing-up or finger-pointing. You can't say, "Here's what it's about." It's about too *many* things. . . .

PROLOGUE

The quiet third of the Twenty-First Century came to an end at ten o'clock on the morning of May 17, 2034, with the return to earth of a modified Fafnir space cruiser under the command of Capt. Avery Swope. Perhaps in an earlier or a later day, the visitation which began on the above date might have had less effect. But the earth was lulled and content with itself, and for good reason—international rivalries having reverted to the football fields and tennis courts, an intelligent balance of trade and redistribution of agriculture and industry having been achieved.

Captain Swope's mission was to accomplish the twelfth off-earth touchdown, and the body on which he touched was Iapetus (sometimes Japetus), the remarkable eighth satellite of Saturn. All Saturn's satellites are remarkable, each for a different reason. Iapetus' claim to fame is his fluctuating brilliance; he always swings brightly around the eastern limb of the ringed planet, and dwindles dimly behind the western edge. Obviously the little moon is half bright and half dark, and keeps one face turned always to its parent; but why should a moon be half bright and half dark?

It was an intriguing mystery, and it had become the fashion to affect all sorts of decorations which mimicked the fluctuations of the inconstant moonlet: cuff links and tunic clasps which dimmed and brightened, bread-wrappers and book-jackets in dichotomous motley. Copies were reproduced of the mid-century master Pederson's magnificent oil painting of a space ship aground on one of Saturn's moons, with four suited figures alighting, and it became a sort of colophon for news stories about Swope's achievement and window displays of bicolored gimcrackery—with everyone marveling at the Twentieth Century artist's unerring prediction of a Fafnir's contours, and no one noticing that the painting could not possibly have been of Iapetus, which has no blue sky nor weathered rocks, but must certainly have been the meticulous Pederson's visualization of Titan. Still, everyone thought it was Iapetus, and since it gave no evidence as to why Iapetus changed its brightness, the public embraced the painting as the portrait of a mystery. They told each other that Swope would find out.

Captain Swope found out, but Captain Swope did not tell. Something happened to his Fafnir on Iapetus. His signals were faintly heard through the roar of an electrical disturbance on the parent world, and they were unreadable, and they were the last. Then, voiceless, he returned, took up his braking orbit, and at last came screaming down out of the black into and through the springtime blue. His acquisition of the tail-down attitude so very high—over fifty miles—proved that something was badly wrong. The extreme deliberation with which he came in over White Sands, and the constant yawing, like that of a baseball bat balanced on a fingertip, gave final proof that he was attempting a landing under manual control, something never before attempted with anything the size of a Fafnir. It was superbly done, and may never be equaled, that roaring drift down and down through the miles, over forty-six of them, and never a yaw that the sensitive hands could not compensate, until that last one.

What happened? Did some devil-imp of wind, scampering runt of a hurricane, shoulder against the Fafnir? Or was the tension and strain at last too much for weary muscles which

could not, even for a split second, relax and pass the controls to another pair of hands? Whatever it was, it happened at three and six-tenths miles, and she lay over bellowing as her pilot made a last desperate attempt to gain some altitude and perhaps another try.

She gained nothing, she lost a bit, hurtling like a dirigible gone mad, faster and faster, hoping to kick the curve of the earth down and away from her, until, over Arkansas, the forward section of the rocket liner—the one which is mostly inside the ship—disintegrated and she blew off her tail. She turned twice end over end and thundered into a buckwheat field.

Two days afterward a photographer got a miraculous picture. It was darkly whispered later that he had unforgettably carried the child—the three-year-old Tresak girl from the farm two miles away—into the crash area and had inexcusably posed her there; but this could never be proved, and anyway, how could he have known? Nevertheless, the multiple miracles of a momentary absence of anything at all in the wide clear background, of the shadows which mantled her and of the glitter of the many-sharded metal scrap which reared up behind her to give her a crown—but most of all the miracle of the child herself, black-eyed, golden-haired, trusting, fearless, one tender hand resting on some jagged steel which would surely shred her flesh if she were less beautiful—these made one of the decade's most memorable pictures. In a day she was known to the nation, and warmly loved as a sort of infant phoenix rising from the disaster of the roaring bird; the death of the magnificent Swope could not cut the nation quite as painfully because of her, as that cruel ruin could not cut her hand.

The news, then, that on the third day after her contact with the wreck of the ship from Iapetus, the Tresak child had fallen ill of a disfiguring malady never before seen on earth, struck the nation and the world a dreadful and terrifying blow. At first there was only a numbness, but at the appearance of the second, and immediately the third cases of the disease, humanity sprang into action. The first thing it did was to pass seven Acts, an Executive Order and three Conventions against any further off-earth touchdowns;

so, until the end of the iapetitis epidemic, there was an end to all but orbital space flight.

"You're going to be all right," she whispered, and bent to kiss the solemn, comic little face. (They said it wasn't contagious; at least, adults didn't get it.) She straightened up and smiled at him, and Billy smiled his half-smile—it was the left half—in response. He said something to her, but by now his words were so blurred that she failed to catch them. She couldn't bear to have him repeat whatever it was; he seemed always so puzzled when people did not understand him, as if he could hear himself quite plainly. So to spare herself the pathetic pucker which would worry the dark half of his face, she only smiled the more and said again, "You're going to be all right," and then she fled.

Outside in the corridor she leaned for a moment against the wall and got rid of the smile, the rigid difficult hypocrisy of that smile. There was someone standing there on the other side of the scalding blur which replaced the smile; she said, because she had to say it to someone just then: "How could I promise him that?"

"One does," said the man, answering. She shook away the blur and saw that it was Dr. Otis. "I promised him the same thing myself. One just . . . does," he shrugged. "Heri Gonza promises them, too."

"I saw that," she nodded. "He seems to wonder 'How could I?' too."

"He does what he can," said the doctor, indicating, with a motion of his head, the special hospital wing in which they stood, the row of doors behind and beyond, doors to laboratories, doors to research and computer rooms, store rooms, staff rooms, all donated by the comedian. "In a way he has more right to make a promise like that than Billy's doctor."

"Or Billy's sister," she agreed tremulously. She turned to walk down the corridor, and the doctor walked with her. "Any new cases?"

"Two."

She shuddered. "Any—"

"No," he said quickly, "no deaths." And as if to change the subject, he said, "I understand you're to be congratulated."

"What? Oh," she said, wrenching her mind away from the image of Billy's face, half marble, half mobile mahogany. "Oh, the award. Yes, they called me this afternoon. Thank you. Somehow it . . . doesn't mean very much right now."

They stood before his office at the head of the corridor. "I think I understand how you feel," he said. "You'd trade it in a minute for—" he nodded down the corridor toward the boy's room.

"I'd even trade it for a reasonable hope," she agreed. "Good night, Doctor. You'll call me?"

"I'll call you if anything happens. Including anything good. Don't forget that, will you? I'd hate to have you afraid of the sound of my voice."

"Thank you, Doctor."

"Stay away from the trideo this once. You need some sleep."

"Oh, Lord. Tonight's the big effort," she remembered.

"Stay away from it," he said with warm severity. "You don't need to be reminded of iapetitis, or be persuaded to help."

"You sound like Dr. Horowitz."

His smile clicked off. She had meant it as a mild pleasantry; if she had been less tired, less distraught, she would have had better sense. Better taste. Horowitz' name echoed in these of all halls like a blasphemy. Once honored as among the greatest of medical researchers, he had inexplicably turned his back on Heri Gonza and his Foundation, had flatly refused research grants, and had publicly insulted the comedian and his great philanthropy. As a result he had lost his reappointment to the directorship of the Research Institute and a good deal of his professional standing. And like the sullen buffoon he was, he plunged into research—"real research," he inexcusably called it—on iapetitis, attempting single-handedly not only to duplicate the work of the Foundation, but to surpass it: "the only way I know," he had told a reporter, "to pull the pas-

ture out from under that clod and his trained sheep." Heri Gonza's reply was typical: by deft sketches on his programs, he turned Horowitz into an improper noun, defining a horowitz as a sort of sad sack or poor soul, pathetic, mildly despicable, incompetent and always funny—the kind of subhuman who not only asks for, but justly deserves, a pie in the face. He backed this up with a widely publicized standing offer to Dr. Horowitz of a no-strings-attached research grant of half a million; which Dr. Horowitz, after his first unprintable refusal (his instructions to the comedian as to what he could do with the money were preceded by the suggestion that he first change it into pennies), ignored.

Therefore the remark, even by a Nobel prizewinner, even by a reasonably handsome woman understandably weary and upset, even by one whose young brother lay helpless in the disfiguring grip of an incurable disease—such a remark could hardly be forgiven, especially when made to the head of the Iapetitis Wing of the Medical Center and local chairman of the Foundation. "I'm sorry, Dr. Otis," she said. "I . . . probably need sleep more than I realized."

"You probably do, Dr. Barran," he said evenly, and went into his office and closed the door.

"Damn," said Iris Barran, and went home.

No one knew precisely how Heri Gonza had run across the idea of an endurance contest cum public solicitation of funds, or when he decided to include it in his bag of tricks. He did not invent the idea; it was a phenomenon of early broadcasting, which erupted briefly on the marriage of video with audio in a primitive device known as *television*. The performances, consisting of up to forty continuous hours of entertainment interspersed with pleas for aid in one charity or another, were headed by a single celebrity who acted as master of ceremonies and beggar-in-chief. The terminologically bastardized name for this production was *telethon*, from the Greek root *tele*, to carry, and the syllable *thon*, meaningless in itself but actually the last syllable of the word *marathon*. The telethon, sensational at first, had rapidly deteriorated, due to its use by numbers

of greedy publicists who, for the price of a phone call, could get large helpings of publicity by pledging donations which, in many cases, they failed to make, and the large percentage of the citizenry whose impulse to give did not survive their telephoned promises. And besides, the novelty passed, the public no longer watched. So for nearly eighty years there were no telethons, and if there had been, a disease to hang one on would have been hard to find. Heart disease, cancer, multiple sclerosis, muscular dystrophy—these, and certain other infirmities on which public appeals had been based, had long since disappeared or were negligibly present. Now, however, there was iapetitis.

A disorder of the midbrain and central nervous system, it attacked children between the ages of three and seven, affecting only one hemisphere, with no statistical preference for either side. Its mental effects were slight (which in its way was one of the most tragic aspects of the disease), being limited to aphasia and sometimes a partial alexia. It had more drastic effects on the motor system, however, and on the entire cellular regeneration mechanisms of the affected side, which would gradually solidify and become inert, immobile. The most spectacular symptom was on the superficial pigmentation. The immobilized side turned white as bleached bone, the other increasingly dark, beginning with a reddening and slowly going through the red-browns to a chocolate in the later stages. The division was exactly on the median line, and the bicolouration proceeded the same way in all cases, regardless of the original pigmentation.

There was no known cure.

There was no known treatment.

There was only the Foundation—Heri Gonza's Foundation—and all it could do was install expensive equipment and expensive people to operate it . . . and hope. There was nothing anyone else could do which would not merely duplicate Foundation efforts and, besides, with one exception the Foundation already had the top people in microbiology, neurology, virology, internal medicine, and virtually every other discipline which might have some bearing on the disease. There were, so far, only 376 known cases, every one

of which was in a Foundation hospital.

Heri Gonza had been associated with the disease since the very beginning, when he visited a children's hospital and saw the appalling appearance of the first case, little Linda Tresak of Arkansas. When four more cases appeared in the Arkansas State Hospital after she was a patient there for some months, Heri Gonza moved with characteristic noise and velocity. Within forty-eight hours of his first knowledge of the new cases, all five were ensconced in a specially vacated wing of the Medical Center, and mobilization plans were distributed to centers all over the world, so that new clinics could be set up and duplicate facilities installed the instant the disease showed up. There were at present forty-two such clinics. Each child had been picked up within hours of the first appearance of symptoms, whisked to the hospital, pampered, petted, and . . . observed. No treatment. No cure. The white got whiter, the dark got darker, the white side slowly immobilized, the dark side grew darker but was otherwise unaffected; the speech difficulty grew steadily (but extremely slowly) worse; the prognosis was always negative. Negative by extrapolation: any organism in the throes of such deterioration might survive for a long time, but must ultimately succumb.

In a peaceful world, with economy stabilized, population growing but not running wild any longer, iapetitis was big news. The biggest.

The telethon was, unlike its forbears, not aimed at the public pocket. It was to serve rather as a whip to an already aware world, information to the informed, aimed at earlier and earlier discovery and diagnosis. It was one of the few directions left to medical research. The disease was obviously contagious, but its transmission method was unknown. Some child, somewhere, might be found early enough to display some signs of the point of entry of the disease, something like a fleabite in spotted fever, the mosquito puncture in malaria—some sign which might heal or disappear soon after its occurrence. A faint hope, but it was a hope, and there was little enough of that around.

So, before a wide gray backdrop bearing a forty-foot in-

signe in the center, the head and shoulders of a crying child vividly done in half silver, half mahogany, Heri Gonza opened his telethon.

Iris Barran got home well after it had started; she had rather overstayed her hospital visit. She came in wearily and slumped on the divan, thinking detachedly of Billy, thinking of Dr. Otis. The thought of the doctor reminded her of her affront to him, and she felt a flash of annoyance, first at herself for having done it, and immediately another directed at him for being so touchy—and so unforgiving. At the same time she recalled his advice to get some sleep, not to watch the telethon; and in a sudden, almost childish burst of rebellion she slapped the arm of the divan and brought the trideo to life.

The opposite wall of the room, twelve feet high, thirty feet long, seemed to turn to smoke, which cleared to reveal an apparent extension of the floor of the room, back and farther back, to Heri Gonza's great gray backdrop. All around were the sounds, the smells, the pressure of the presence of thousands of massed, rapt people. ". . . so I looked down and there the horse had caught its silly hoof in my silly stirrup. 'Horse,' I says, 'if you're gettin' on, I'm gettin' off!'"

The laugh was a great soft booming explosion, as usual out of all proportion to the quality of the witticism. Heri Gonza had that rarest of comic skills, the ability to pyramid his effects, so that the mildest of them seemed much funnier than it really was. It was mounted on a rapidly stacked structure of previous quips and jokes, each with its little store of merriment and all merriment suppressed by the audience for fear of missing not only the next joke, but the entire continuity. When the pyramid was capped, the release was explosive. And yet in that split instant between capper and explosion, he always managed to slip in a clear three or four syllables. "On my way here—" or "When the president—" or "Like the horowitz who—" which, repeated and completed after the big laugh, turned out to be the base brick for the next pyramid.

Watching his face during the big laughs—yocks, the knowledgeable columnists and critics called them—had be-

come a national pastime. Though the contagion of laughter was in his voice and choice of phrase, he played everything deadpan. A small, wiry man with swift nervous movements, he had a face-by-the-million: anybody's face. Its notable characteristics were three: thin lips, masked eyes, impenetrable as onyx, and astonishing jug-handle ears. His voice was totally flexible, capable of almost any timbre, and with the falsetto he frequently affected, his range was slightly over four octaves. He was an accomplished ventriloquist, though he never used the talent with the conventional dummy, but rather to interrupt himself with strange voices. But it was his ordinary, unremarkable, almost immobile face which was his audience's preoccupation. His face never laughed, though in dialogue his voice might. His voice could smile, too, even weep, and his face did not. But at the yock, if it was a big yock, a long one, his frozen waiting face would twitch; the thin lips would fill out a trifle: he's going to smile, he's going to *smile!* Sometimes, when the yock was especially fulsome, his mouth actually would widen a trifle; but then it was always time to go on, and, deadpan, he would. What could it matter to anyone whether or not one man in the world smiled? On the face of it, nothing: yet millions of people, most of whom were unaware of it, bent close to their trideo walls and peered raptly, waiting, waiting to see him smile.

As a result, everyone who heard him, heard every word.

Iris found herself grateful, somehow—able to get right out of herself, sweep in with that vast unseen crowd and leave herself, her worrying self, her angry, weary, logical, Nobel-prizewinning self asprawl on the divan while she hung on and smiled, hung on and tittered, hung on and exploded with the world.

He built, and he built, and the trideo cameras crept in on him until, before she knew it, he was standing as close to the invisible wall as belief would permit; and still he came closer, so that he seemed in the room with her; and this was a pyramid higher than most, more swiftly and more deftly built, so that the ultimate explosion could contain itself not much longer, not a beat, not a second. . . .

And he stopped in mid-sentence, mid-word, even, and,

over at the left, fell to one knee and held out his arms to the right. "Come on, honey," he said in a gentle, tear-checked purr.

From the right came a little girl, skipping. She was a beautiful little girl, a picture-book little girl, with old-fashioned bouncing curls, shiny black patent-leather shoes with straps, little white socks, a pale-blue dress with a very wide, very short skirt.

But she wasn't skipping, she was limping. She almost fell, and Heri was there to catch her.

Holding her in his arms, while she looked trustingly up into his face, he walked to center stage, turned, faced the audience. His eyes were on her face; when he raised them abruptly to the audience, they were, by some trick of the light (or of Heri Gonza) unnaturally bright.

And he stood, that's all he did, for a time, stood there with the child in his arms, while the pent-up laughter turned to frustrated annoyance, directed first at the comedian, and slowly, slowly, with a rustle of sighs, at the audience itself by the audience. Ah, to see such a thing and be full of laughter: how awful I am. I'm sorry. I'm sorry.

One little arm was white, one pink. Between the too-tiny socks and the too-short skirt, the long thin legs were one white, one pink.

"This is little Koska," he said after an age. The child smiled suddenly at the sound of her name. He shifted her in his elbow so he could stroke her hair. He said softly, "She's a little Esthonian girl, from the far north. She doesn't speak very much English, so she won't mind if we talk about her." A huskiness crept into his voice. "She came to us only yesterday. Her mother is a good woman. She sent her to us the minute she noticed."

Silence again, then he turned the child so their faces were side by side, looking straight into the audience. It was hard to see at first, and then it became all too plain—the excessive pallor of the right side of her face, the too-even flush on the left, and the sharp division between them down the center.

"We'll make you better," he whispered. He said it again in a foreign language, and the child brightened, smiled trust-

ingly into his face, kept her smile as she faced the audience again: and wasn't the smile a tiny bit wider on the pink side than on the white? You couldn't tell . . .

"Help me," said Heri Gonza. "Help her, and the others, help us. Find these children, wherever in the world they might be, and call us. Pick up any telephone in the world and say simply, I . . . F. That's IF, the Iapetitis Foundation. We treat them like little kings and queens. We never cause them any distress. By trideo they are in constant touch with their loved ones." Suddenly, his voice rang. "The call you make may find the child who teaches us what we need to know. Your call—*yours!*—may find the cure for us."

He knelt and set the child gently on her feet. He knelt holding her hands, looking into her face. He said, "And whoever you are, wherever you might be, you doctors, researchers, students, teachers . . . if anyone, anywhere, has an inkling, an idea, a way to help, any way at all—then call me. Call me now, call here—" He pointed upward and the block letters and figures of the local telephone floated over his head—"and tell me. I'll answer you now, I'll personally speak to anyone who can help. Help, oh, help."

The last word rang and rang in the air. The deep stage behind him slowly darkened, leaving the two figures, the kneeling man and the little golden girl, flooded with light. He released her hands and she turned away from him, smiling timidly, and crossed the wide stage. It seemed to take forever, and as she walked, very slightly she dragged her left foot.

When she was gone, there was nothing left to look at but Heri Gonza. He had not moved, but the lights had changed, making of him a luminous silhouette against the endless black behind him . . . one kneeling man, a light in the universal dark . . . hope . . . slowly fading, but there, still there . . . no? Oh, there . . .

A sound of singing, the palest of pale blue stains in deep center. The singing up, a powerful voice from the past, an ancient, all but forgotten tape of one of the most moving renditions the world has ever known, especially for such a moment as this: Mahalia Jackson singing *The Lord's*

Prayer, with the benefit of such audio as had not been dreamed of in her day . . . with a cool fresh scent, with inaudible quasi-hypnotic emanations, with a whispering chorus, a chorus that angels might learn from.

Heri Gonza had not said, "Let us pray." He would never do such a thing, not on a global network. There was just the kneeling dimness, and the blue glow far away in the black. And if at the very end the glow looked to some like the sign of the cross, it might have been only a shrouded figure raising its arms; and if this was benediction, surely it was in the eye of the beholder. Whatever it was, no one who saw it completely escaped its spell, or ever forgot it. Iris Barran, for one, exhausted to begin with, heart and mind full to bursting with the tragedy of iapetitis; Iris Barran was wrung out by the spectacle. All she could think of was the last spoken word: *Help!*

She sprang to her phone and waved it active. With trembling fingers she dialed the number which floated in her mind as it had on the trideo wall, and to the composed young lady who appeared in her solido cave, saying, "Trideo, C. A. O. Good evening," she gasped, "Heri Gonza—quickly."

"One moment, please," said the vision, and disappeared, to be replaced instantly by another, even more composed, even lovelier, who said, "I.F. Telethon."

"Heri Gonza."

"Yes, of course. Your name?"

"I-Iris Barran. Dr. Iris Barran."

The girl looked up sharply. "Not the—"

"Yes, I won the Nobel prize. Please—let me speak to Heri Gonza."

"One moment, please."

The next one was a young man with curly hair, a bell-like baritone, and an intensely interested face. He was Burcke of the network. He passed her to a jovial little fat man with shrewd eyes who was with Continuity Acceptance. Iris could have screamed out loud. But a worldwide appeal for calls would jam lines and channels for hours, and obviously a thorough screening process was essential. She was dimly aware that her name and face, only today in all the

news, had already carried her to the top. Consciously, she thought of none of this; she held on and drove, wanting only to help . . . *help* . . . A snatch of the conversation she had had with Dr. Otis drifted across her mind: *I guess you'd trade it all for* . . . and then a heart-rending picture of Billy's face, trying to smile with half a mouth. *I'd trade it all for a reasonable hope* . . . and suddenly she was staring into the face of Heri Gonza. Reflexively she glanced over her shoulder at the trideo wall; Heri Gonza was there too, with a solidophone pillar in center stage, its back to the audience so that only the comedian could see its cave. Light from it flickered on his face.

"I'd know that face anywhere!" he said raspingly.

"Oh," she said faintly, "Mr. . . . uh . . ." and then remembered that one of his public affectations was never to permit anyone to call him Mister. She said, "Heri Gonza, I . . . I'm Iris B-Barran, and I—" She realized that her voice could not be heard over the trideo. She was grateful for that.

He said, just as stridently, "I know who you are. I know the story of your life too." Switching to a comic quack, he said, "So-o-o?"

"You know I just won the Nobel award. M—uh, Heri Gonza, I want to help, more than anything in the world, I want to help. My brother has it. W—would you like me to give the award money to you . . . I mean, to the Foundation?"

She did not know what she expected in exchange for this stunning offer. She had not thought that far ahead. What she did not expect was . . .

"You *what*?" he yelled, so loud she drew her head down, gracelessly, turtlelike. "Listen, you, I got along without you before and I can get along without you now. You're getting from me, see, and I'm giving. What you got I don't want. I'm not up here to do *you* no good. I tell you what you got, you *got* a wrong number, and you *are*, s-s-s-s-so," he hissed in a hilarious flatulent stutter, "s-s-so long." And before she could utter another sound he waved her off and her phone cave went black.

Numb with shock, she slowly turned to the trideo wall,

where Heri Gonza was striding downstage to the audience. His expressionless face, his gait, his posture, the inclination of his head, and his tone of voice all added to an amused indignation, with perhaps a shade more anger than mirth. He tossed a thumb at the phone and said, "Wits we got calling, can you imagine? At a time like this. We got dim wits, half wits, and—" exactly the right pause; there was one bleat of laughter somewhere in the audience and then a thousand voices to chorus with him—"horowitz!"

Iris sank back in the phone chair and covered her face, pressing so hard against her tired eyes that she saw red speckles. For a time she was shocked completely beyond thought, but at last she was able to move. She rose heavily and went to the divan, arrested her hand as she was about to click off the trideo. Heri Gonza was back at the stage phone talking eagerly to someone, his voice honey and gentleness. "Oh, bless you, brother, and thank you. You may have an idea there, so I tell you what you do. You call the I.F. at Johannesburg and arrange a meeting with the doctors there. They'll listen. . . . No, brother, collect of course. What's-amatta, brother, you broke? I got news for you, for you-ee are-ee a-ee good-ee man-ee yes-ee indeedy-dee: you ain'ta broka no mo. A man like you? I got a boy on the way this very minute with a bag o' gold for the likes of you, brother. . . . Oh now, don't say thanks, you mak-a me mad. 'By."

He waved off, and turned to the audience to intone, "A man with an idea—little one, big one, who knows? But it's to help . . . so bless him."

Thunderous applause. Iris let her hand finish the gesture and switched off.

She went and washed her face, and that gave her strength enough to shower and change. After that she could think almost normally. How *could* he?

She turned over impossible alternatives, explanations. His phone was a dummy: he couldn't see her, didn't know who was on the phone. Or: it was his way of being funny, and she was too tired to understand. Or . . . or . . . it was no use: it had really happened, he had known what he was doing, he had a reason.

But *what* reason? Why? Why?

In her mind she again heard that roar from the audience: Horowitz. With difficulty, because it still stung, she pieced together the conversation and then, moving her forefinger toward her phone and the trideo, back and forth, puzzled out what had gone out over the air and what had not. Only then did she fully understand that Heri Gonza had done what he had done to make it seem that his first call was from Dr. Horowitz. But if he needed that particular gag at that time, why didn't he fake it to a dead phone? Why actually converse with her, cut her down like that?

And he hadn't let her help. That was worse than any of the rudeness, the insult. He wouldn't let her help.

What to do? Making the gesture she had made had not been hard; having it refused was more than she could bear. She must help; she would help. Now of all times, with all this useless money coming to her; she didn't need it, and it might, it just might somehow help, and bring Billy back home.

Well then, expose Heri Gonza. Give him back some of his own humiliation. Call in the newsmen, make a statement. Tell them what she had offered, tell them just who was on the line. He'd *have* to take the money, and apologize to boot.

She stood up; she sat down again. No. He had known what he was doing. He had known who she was; he must have a telltale on his phone to get information on his callers from that screening committee. She knew a lot about Heri Gonza. He seemed so wild, so impulsive; he was not. He ran his many enterprises with a steel fist; he took care of his own money, his own bookings. He did not make mistakes nor take chances. He had refused her and the Foundation would refuse her: the Foundation *was* Heri Gonza. He had his reasons, and if she had any defense at all against what he had done, he would not have done it.

She wasn't allowed to help.

Unless—

She suddenly ran to the phone. She dialed 5, and the cave lit up with the floating word DIRECTORY. She dialed H, O, R, and touched the *Slow* button until she had the

Horowitzes. There were pathetically few of them. Almost everyone named Horowitz had filed unlisted numbers: many had gone so far as to change their names.

George Rehoboth Horowitz, she remembered.

He wasn't listed.

She dialed Information and asked. The girl gave her a pitying smile and told her the line was unlisted. And of course it would be. If Dr. Horowitz wasn't the most hated man on earth, he was the next thing to it. A listed phone would be useless to him, never silent.

"Has he screening service?" Iris asked suddenly.

"He has," said the girl, company-polite as always, but now utterly cold. Anyone who *knew* that creature to speak to . . . "Your name, please?"

Iris told her, and added, "Please tell him it's very important."

The cave went dark but for the slowly rotating symbol of the phone company, indicating that the operator was doing her job. Then a man's head appeared and looked her over for a moment, and then said, "Dr. Barran?"

"Dr. Horowitz."

She had not been aware of having formed any idea of the famous (infamous?) Horowitz; yet she must have. His face seemed too gentle to have issued those harsh rejoinders which the news attributed to him; yet perhaps it was gentle enough to be taken for the fumbler, the fool so many people thought he was. His eyes, in some inexplicable way, assured her that his could not be clumsy hands. He wore old-fashioned exterior spectacles; he was losing his hair; he was younger than she had thought, and he was ugly. Craggs are ugly, tree-trunks, the hawk's pounce, the bear's foot, if beauty to you is all straight lines and silk. Iris Barran was not repulsed by this kind of ugliness. She said bluntly, "Are you doing any good with the disease?" She did not specify: today, there was only one disease.

He said, in an odd way as if he had known her for a long time and could judge how much she would understand, "I have it all from the top down to the middle, and from the bottom up to about a third. In between—nothing, and no way to get anything."

"Can you go any further?"

"I don't know," he said candidly. "I can go on trying to find ways to go further, and if I find a way, I can try to move along on it."

"Would some money help?"

"It depends on whose it is."

"Mine."

He did not speak, but tilted his head a little to one side and looked at her.

She said, "I won . . . I have some money coming in. A good deal of it."

"I heard," he said, and smiled. He seemed to have very strong teeth, not white, not even, just spotless and perfect. "It's a good deal out of my field, your theoretical physics, and I don't understand it. I'm glad you got it. I really am. You earned it."

She shook her head, denying it, and said, "I was surprised."

"You shouldn't have been. After ninety years of rather frightening confusion, you've restored the concept of parity to science—" he chuckled—"though hardly in the way anyone anticipated."

She had not known that this was her accomplishment; she had never thought of it in those terms. Her demonstration of gravitic flux was a subtle matter to be communicated with wordless symbols, quite past speech. Even to herself she had never made a conversational analogue of it; this man had, though, not only easily, but quite accurately.

She thought, if this isn't his field, and he grasps it like that—just how good must he be in his own? She said, "Can you use the money? Will it help?"

"God," he said devoutly, "can I use it. . . . As to whether it will help, Doctor, I can't answer that. It would help me go on. It may not make me arrive. Why did you think of me?"

Would it hurt him to know? she asked herself, and answered, it would hurt him if I were not honest. She said, "I offered it—to the Foundation. They wouldn't touch it. I don't know why."

"I do," he said, and instantly held up his hand. "Not

now," he said, checking her question. He reached somewhere off-transmission and came up with a card, on which was lettered, AUDIO TAPPED.

"Who—"

"The world," he overrode her, "is full of clever amateurs. Tell me, why are you willing to make such a sacrifice?"

"Oh—the money. It isn't a sacrifice. I have enough: I don't need it. And—my baby brother. He has it."

"I didn't know," he said, with compassion. He made a motion with his hands. She did not understand. "What?"

He shook his head, touched his lips, and repeated the motion, beckoning, at himself and the room behind him. Oh. *Come where I am.*

She nodded, but said only, "It's been a great pleasure talking with you. Perhaps I'll see you soon."

He turned over his card; obviously he had used it many times before. It was a map of a section of the city. She recognized it readily, followed his pointing finger, and nodded eagerly. He said, "I hope it is soon."

She nodded again and rose, to indicate that she was on her way. He smiled and waved off.

It was like a deserted city, or a decimated one; almost everyone was off the streets, watching the telethon. The few people who were about all hurried, as if they were out against their wills and anxious to get back and miss as little as possible. It was known that he intended to go on for at least thirty-six hours, and still they didn't want to miss a minute of him. Wonderful, wonderful, she thought, amazed (not for the first time) at people—just people. Someone had once told her that she was in mathematics because she was so apart from, amazed at, people. It was possible. She was, she knew, very unskilled with people, and she preferred the company of mathematics, which tried so hard to be reasonable, and to say what was really meant. . . .

She easily found the sporting-goods store he had pointed out on his map, and stepped into the darkened entrance. She looked carefully around and saw no one, then tried the door. It was locked, and she experienced a flash of disappointment of an intensity that surprised her. But even as she

felt it, she heard a faint click, tried the door again, and felt it open. She slid inside and closed it, and was gratified to hear it lock again behind her.

Straight ahead a dim, concealed light flickered, enough to show her that there was a clear aisle straight back through the store. When she was almost to the rear wall, the light flickered again, to show her a door at her right, deep in an ell. It clicked as she approached, and opened without trouble. She mounted two flights of stairs, and on the top landing stood Horowitz, his hands out. She took them gladly, and for a wordless moment they stood like that, laughing silently, until he released one of her hands and drew her into his place. He closed the door carefully and then turned and leaned against it.

"Well!" he said. "I'm sorry about the cloak and dagger business."

"It was very exciting." She smiled. "Quite like a mystery story."

"Come in, sit down," he said, leading the way. "You'll have to excuse the place. I have to do my own housekeeping, and I just don't." He took a test-tube rack and a cracked bunsen tube from an easy chair and nodded her into it. He had to make two circuits of the room before he found somewhere to put them down. "Price of fame," he said sardonically, and sat down on a rope-tied stack of papers bearing the flapping label *Proceedings of the Pan-American Microbiological Society*. "Where that clown makes a joke of Horowitz, other fashionable people make a game of Horowitz. A challenge. Track down Horowitz. Well, if they did, through tapping my phone or following me home, that would satisfy them. Then I would be another kind of challenge. Bother Horowitz. Break in and stir up his lab with a stick. You know."

She shuddered. "People are . . . are so . . ."

"Don't say that, whatever it was," said Horowitz. "We're living in a quiet time, Doctor, and we haven't evolved too far away from our hunting and tracking appetites. It probably hasn't occurred to you that your kind of math and my kind of biology are hunting and tracking too. Cut away our science bump and we'd probably hunt with the pack too. A

big talent is only a means of hunting alone. A little skill is a means of hunting alone some of the time."

"But . . . why must they hunt you?"

"Why must you hunt gravitic phenomena?"

"To understand it."

"Which means to end it as a mystery. Cut it down to your size. Conquer it. You happen to be equipped with a rather rarefied type of reason, so you call your conquest understanding. The next guy happens to be equipped with fourteen inches of iron pipe and achieves his conquest with it instead."

"You're amazing," she said openly. "You love your enemies, like—"

"Love thine enemies as thyself. Don't take any piece of that without taking it all. How much I love people is a function of how much I love Horowitz, and you haven't asked me about that. Matter of fact, *I* haven't asked me about that and I don't intend to. My God, it's good to talk to somebody again. Do you want a drink?"

"No," she said. "How much do you love Heri Gonza?"

He rose and hit his palm with his fist and sat down again, all his gentleness folded away and put out of sight. "There's the exception. You can understand anything humanity does if you try, but you can't understand the inhumanity of a Heri Gonza. The difference is that he knows what is evil and what isn't, and doesn't care. I don't mean any numb byrote moral knowledge learned at the mother's knee, the kind that afflicts your pipe-wielder a little between blows and a lot when he gets his breath afterward. I mean a clear, analytical, extrapolative, brilliantly intelligent knowledge of each act and each consequence. Don't underestimate that devil."

"He . . . seems to . . . I mean, he does love children," she said fatuously.

"Oh, come on now. He doesn't spend a dime on his precious Foundation that he wouldn't have to give to the government in taxes. Don't you realize that? He doesn't do a thing he doesn't have to do, and he doesn't have to love those kids. He's using those kids. He's using the filthiest affliction mankind has known for a long time just to keep himself front and center."

"But if the Foundation does find a cure, then he—"

"Now you've put your finger on the thing that nobody in the world but me seems to understand—why I won't work with the Foundation. Two good reasons. First, I'm way ahead of them. I don't need the Foundation and all those fancy facilities. I've got closer to the nature of iapetitis than any of 'em. Second, for all my love for and understanding of people, I don't want to find out what I'm afraid I would find out if I worked there and if a cure was found."

"You mean he'd—he'd withhold it?"

"Maybe not permanently. Maybe he'd sit on it until he'd milked it dry. Years. Some would die by then. Some are pretty close as it is." She thought of Billy and bit her hand.

"I didn't say he would do that," Horowitz said, more gently. "I said I don't want to be in a position to find out. I don't want to know that any member of my species could do a thing like that. Now you see why I work by myself, whatever it costs. If I can cure iapetitis, I'll say so. I'll do it, I'll prove it. That's why I don't mind his kind of cheap persecution. If I succeed, all that harassment makes it impossible for him to take credit or profit in any way."

"Who are you going to cure?"

"What?"

"He's got them all. He's on trideo right now, a telethon, the biggest show of the last ten years, hammering at people to send him every case the instant it's established." Her eyes were round.

"The logician," he whispered, as round-eyed as she. "Oh, my God, I never thought of that." He took a turn around the room and sat down again. His face was white. "But we don't *know* that. Surely he'd give me a patient. Just one."

"It might cost you the cure. You'd have to, you'd just *have* to give it to him, or you'd be the one withholding it!"

"I won't think about it now," he said hoarsely. "I can't think about it now. I'll get the cure. That first."

"Maybe my brother Billy—"

"Don't even think about it!" he cried. "He's already got it in for you. Don't get in his way any more. He won't let your Billy out of there and you know it. Try anything and he'll squash you like a beetle."

"What's he got against *me*?"

"You don't know? You're a Nobel winner—one of the newsiest things there is. A girl, and not bad-looking at all. You're in the public eye, or you will be by noon tomorrow when the reporters get to you. Do you think for a minute he'd let you or anybody climb on his publicity? Listen, iapetitis is his sole property, his monopoly, and he's not going to share it. What'd you expect him to do, announce the gift on his lousy telethon?"

"I—I c-called him on his telethon."

"You didn't!"

"He pretended the call was from you. But . . . but at the same time he told me . . . ah yes, he said, 'What you got I don't want. I'm not up here to do you no good.'"

Horowitz spread his hands. "Q.E.D."

"Oh," she said, "how awful."

At that point somebody kicked the door open.

Horowitz sprang to his feet, livid. A big man in an open, flapping topcoat shouldered his way in. He had a long horse-face and a blue jaw. His eyes were extremely sad. He said, "Now just relax. Relax and you'll be all right." His hands, as if they had a will of their own, busied themselves about pulling off a tight left-hand glove with wires attached to it and running into his side pocket.

"Flannel!" Horowitz barked. "How did you get in?" He stepped forward, knees slightly bent, head lowering. "You'll get out of here or so help me—"

"No!" Iris cried, clutching at Horowitz's forearm. The big man outreached and outweighed the biologist, and certainly would fight rougher and dirtier.

"Don't worry, lady," said the man called Flannel sleepily. He raised a lazy right hand and made a slight motion with it, and a cone-nosed needler glittered in his palm. "He'll be good—won't you, boy? Or I'll put you to bed for two weeks an' a month over."

He sidled past and, never taking his gaze from Horowitz for more than a flickering instant, opened the three doors which led from the laboratory—a bathroom, a bedroom, a storage closet.

"Who is he? You know him?" Iris whispered.

"I know him," growled Horowitz. "He's Heri Gonza's bodyguard."

"Nobody but the two of them," said Flannel.

"Good," said a new voice, and a second man walked in, throwing off a slouch hat and opening the twin to the long, loose topcoat Flannel wore. "Hi, chillun," said Heri Gonza.

There was a long silence, and then Horowitz plumped down on his pile of *Proceedings*, put his chin in his hands, and said in profound disgust, "Ah, for God's sake."

"Dr. Horowitz," said Heri Gonza pleasantly, nodding, "and Dr. Barran."

Iris said shakily, "I th-thought you were doing a sh-show."

"Oh, I am, I am. All things are possible if you only know how. At the moment Chitsie Bombom is doing a monologue, and she's good for two encores. After that there's a solido of me sitting way up on the flats in the left rear, oh so whimsically announcing the Player's Pub Players. They have a long one-acter and a pantomime. I've even got a ballet company, in case this takes that long."

"Phony to the eyeballs, even when you work," said Horowitz. "In case *what* takes that long?"

"We're going to talk."

"You talk," said Horowitz. "Quickly and quietly and get the hell out of here. 'Scuse me, Dr. Barran."

"Oh, that's all right," she murmured.

"Please," said the comedian softly, "I didn't come here to quarrel with you. I want to end all that. Here and now, and for good."

"We've got something he wants," said Horowitz in a loud aside to Iris.

Heri Gonza closed his eyes and said, "You're making this harder than it has to be. What can I do to make this a peaceful talk?"

"For one thing," said Horowitz, "your simian friend is breathing and it bothers me. Make him stop."

"Flannel," said Heri Gonza, "get out."

Glowering, the big man moved to the door, opened it, and stood on the sill. "All the way," said the comedian. Flannel's broad back was one silent mass of eloquent pro-

test, but he went out and shut the door.

Deftly, with that surprising suddenness of nervous motion which was his stock in trade, Heri Gonza dropped to one knee to bring their faces on a level, and captured Iris's startled hands. "First of all, Dr. Barran, I came to apologize to you for the way I spoke on the telephone. I had to do it—there was no alternative, as you'll soon understand. I tried to call you back, but you'd already gone."

"You followed me here! Oh, Dr. Horowitz, I'm sorry!"

"I didn't need to follow you. I've had this place spotted since two days before you moved into it, Horowitz. But I'm sorry I had to strongarm my way in."

"I yield to curiosity," said Horowitz. "Why didn't my locks alarm when you opened them? I saw Flannel's palm-print eliminator, but dammit, they should have alarmed."

"The locks were here when you rented the place, right? Well, who do you think had them installed? I'll show you where the cutoff switch is before I leave. Anyhow—grant me this point. Was there any other way I could have gotten in to talk with you?"

"I concede," said Horowitz sourly.

"Now, Dr. Barran. You have my apology, and you'll have the explanation to go with it. Believe me, I'm sorry. The other thing I want to do is to accept, with thanks from the bottom of my heart, your very kind offer of the prize money. I want it, I need it, and it will help more than you can possibly realize."

"No," said Iris flatly. "I've promised it to Dr. Horowitz."

Heri Gonza sighed, got to his feet, and leaned back against the lab bench. He looked down at them sadly.

"Go on," said Horowitz. "Tell us how you need money."

"The only two things I have never expected from you are ignorance and stupidity," said Heri Gonza sharply, "and you're putting up a fine display of both. Do you really think, along with all my millions of ardent fans, that when I land a two-million-dollar contract I somehow put two million dollars in the bank? Don't be childish. My operation is literally too big to hide anything in. I have city, county, state and federal tax vultures picking through my whole operational framework. I'm a corporation and subject to outside

accounting. I don't even have a salary; I draw what I need, and I damn well account for it, too. Now, if I'm going to finish what I started with the disease, I'm going to need a lot more money than I can whittle out a chip at a time."

"Then take it out of the Foundation money—that's what it's for."

"I want to do the one thing I'm not allowed to do with it. Which happens to be the one thing that'll break this horrible thing—it has to!"

"The only thing there is like that is a trip to Iapetus."

To this, Heri Gonza said nothing—absolutely nothing at all. He simply waited.

Iris Barran said, "He means it. I think he really means it."

"You're a big wheel," said Horowitz at last, "and there are a lot of corners you can cut, but not that one. There's one thing the government—all governments and all their armed forces—will rise up in wrath to prevent, and that's another landing and return from any place off earth—especially Iapetus. You've got close to four hundred dying kids on your hands right now, and the whole world is scared."

"Set that aside for a moment." The comedian was earnest, warm-voiced. "Just suppose it could be done. Horowitz, as I understand it you have everything you need on the iapetitis virus but one little link. Is that right?"

"That's right. I can synthesize a surrogate virus from nucleic acids and exactly duplicate the disease. But it dies out of its own accord. There's a difference between my synthetic virus and the natural one, and I don't know what it is. Give me ten hours on Iapetus and half a break, and I'll have the original virus under an electron mike. Then I can synthesize a duplicate, a real self-sustaining virus that can cause the disease. Once I have that, the antigen becomes a factory process, with the techniques we have today. We'll have shots for those kids by the barrel lot inside of a week."

Heri Gonza spread his hands. "There's the problem, then. The law won't allow the flight until we have the cure. We won't have the cure unless we make the flight."

Iris said, "A Nobel prize is an awful lot of money, but it won't buy the shell of a space ship."

"I've got the ship."

For the first time Horowitz straightened up and spoke with something besides anger and hopelessness. "What kind of a ship? Where is it?"

"A Fafnir. You've seen it, or pictures of it. I use it for globe-trotting mostly, and VIP sightseeing. It's a deepspace craft, crew of twelve, and twelve passenger cabins. But it handles like a dream, and I've got the best pilot in the world. Kearsarge."

"Kearsarge, God yes. But look, what you call deepspace is Mars and Venus. Not Saturn."

"You don't know what's been done to that ship. She'll sleep four now. I have a lab and a shop in her, and all the rest is nothing but power-plant, shielding and fuel. Hell, she'll make Plutol!"

"You mean you've been working on this already?"

"Man, I've been chipping away at my resources for a year and a half now. You don't know what kind of footsie I've been playing with my business managers and the banks and all. I can't squeak out another dime without lighting up the whole project. Dr. Barran, *now* do you see why I had to treat you like that? You were *the* godsend, with your wonderful offer and your vested interest in Billy. Can you astro-gate?"

"I—oh dear. I know the principles well enough. Yes, I could, with a little instruction."

"You'll get it. Now look, I don't want to see that money. You two will go down and inspect the ship tomorrow morning, and then put in everything you'll need beyond what's already there. You've got food, fuel, water and air enough for two trips, let alone one."

"God," said Horowitz.

"I'll arrange for your astrogation, Dr. Barran. You'll have to dream up a story, secret project or long solitary vacation or some such. Horowitz, you can drop out of sight without trouble."

"Oh, sure, thanks to you."

"Dammit, this time you're welcome," said the comedian, and very nearly smiled. "Now, you'll want one more crew member: I'll take care of that before flight time."

"What about the ship? What will you say?"

"Flight test after overhaul. Breakdown in space, repair, return—some such. Leave that to Kearsarge."

"I freely admit," said Horowitz, "that I don't get it. This is one frolic that isn't coming out of taxes, and it's costing you a packet. What's in it, mountebank?"

"You could ask that," said the comedian sadly. "The kids, that's all."

"You'll get the credit?"

"I won't, I can't, I don't want it. I can't tie in to this jaunt—it would ruin me. Off-earth landings, risking the lives of all earth's kids—you know how they'd talk. No, sir: this is your cooky, Horowitz. You disappear, you show up one day with the answer. I eat crow like a hell of a good sport. You get back your directorship if you want it. Happy ending. All the kids get well." He jumped into the air and clicked his heels four times on the way down. "The kids get well," he breathed with sudden sobriety.

Horowitz said gently, "Heri Gonza, what's with you and kids?"

"I like 'em." He buttoned his coat. "Good night, Dr. Barran. Please accept my apologies again, and don't think too badly of me."

"I don't," she said smiling, and gave him her hand.

"But why do you like kids *that* much?" asked Horowitz.

Heri Gonza shrugged easily and laughed his deadpan laugh. "Never had none," he chuckled. He went to the door and stopped, facing it, suddenly immobile. His shoulders trembled. He whirled suddenly, and the famous carved face was wet, twisted, the mouth tortured and crooked. "Never can," he whispered, and literally ran out of the room.

The weeks went by, the months. Iapetitis cases underwent some strange undulations, and a hope arose that the off-world virus was losing its strength. Some of the older cases actually improved, and a blessing that was, too; for although overall growth was arrested, there was a tendency for the mobile side to grow faster than the other, and during the improvement phase, the sides seemed to equalize. Then, tragically the improvement would slow; and stop.

Incidence of the disease seemed to be slackening as well.

At the last, there had been only three new cases in a year, though they caused a bad flurry, occurring as they did simultaneously in a Belgian village which had had no hint of the disease before.

Heri Gonza still did his weekly stint (less vacation) and still amazed his gigantic audiences with his versatility, acting, singing, dancing, clowning. Sometimes he would make quiet appearances, opening and closing the show and turning it over to a theater or ballet group. During the Old Timer's Celebration he learned to fly a perfect duplicate of a century-old light aircraft with an internal combustion engine, and daringly took his first solo during the show, with a trideo camera occupying the instructor's seat.

At other times he might take up the entire time-segment alone, usually with orchestra and props, once—possibly his most successful show—dressed in sloppy practice clothes on a bare stage, without so much as a chair, and with no assistance but lights and cameras and an occasional invisible touch from the hypnos and the scent generators. Single-handedly he was a parade, a primary schoolroom, a zoo in an earthquake, and an old lady telling three children, ages five, ten, and fifteen, about sex, all at the same time.

And in between (and sometimes during) his shows, he faithfully maintained I.F. He visited his children regularly, every single one of the more than four hundred. He thrilled with their improvements, cheered them in their inevitable relapses. The only time he did not make one of his scheduled shows at all was the time the three cases appeared in Belgium, and then the slot was filled with news-items about the terrifying resurgence, and a world tour of I.F. clinics. He was a great man, a great comic, no question about it, right up to his very last show.

He didn't know it was his last show, which in its way was a pity, because with that knowledge he would have been more than good; he'd have been great. He was that kind of performer.

However, he was good, and was in and out of a vastly amusing variety show, using his old trick of standing off-stage and singing with perfect mimicry while top vocalists stood center stage and mouthed the words. He turned out to

be one of the Japanese girls who built body-pyramids on their bicycles, and, powered by a spring device under the water, joined a succession of porpoises leaping to take fish out of a keeper's hand.

He played, as he preferred to do, in a large studio without an audience, but playing to the audience-response sound supplied to him. He made his cues well, filled in smoothly with ad-libs when a girl singer ran a chorus short on her arrangement, and did his easy stand-up comedy monologue to close. A pity he didn't smile on that show. When the on-the-airs went out and the worklights came on, he threw a sweatshirt around his shoulder and ambled into the wings, where, as usual, the network man, Burcke, waited for him.

"How'd it look, Burckee ol' turkey?"

"Like never before," said Burcke.

"Aw, you're cute yourself," said the comedian. "Let's have a look." One of his greatest delights—and one reason for his fantastic polish—was the relaxed run-through afterward, where he lounged in the projection room and looked at the show he had just finished from beginning to end. He and Burcke and a few interested cast-members, backstage people, and privileged strangers got arranged in the projection room. Beer was passed around and the small-talk used up. As usual they all deferred to Heri Gonza, and when he waved a negligent hand everybody shut up and the projectionist threw the switch.

Title and credits with moving cloud-blanket background. Credits fade, camera zooms toward clouds, which thin to show mountain range. Down through clouds, hover over huge misty lake. Water begins to heave, to be turbulent, suddenly shores rush together and water squirts high through the clouds in a thick column. Empty lake rises up out of clouds, is discovered to be Heri Gonza's open mouth. Pull back to show full face. Puzzled expression. Hand up, into mouth, extracts live goldfish.

GONZA: Welcome to the Heri Gonza show, this week "As you lake it." (*beat*) Which is all you can expect when you open with a punorama. What ho is (*beat*) What ho is yonder? A mountain. What ho is on the mountain? A mountain

goat. What ho is the goat mountain? Why, another moun—
Fellers, keep the lens on me, things are gettin' a little blue
off camera. Now hear ye, Tom, now hear ye, Dick, now hear
ye, hairy Harry, Heri's here. Hee hee, ho ho, here comes
the show.

Soft focus and go to black. Long beat.

Heri took his beer away from his mouth and glared at
the wall. "God's sake, you send all that black?"

"Sure did," said Burcke equably.

"Man, you don't do that for anything but the second com-
ing. What you think they expect with all that black? It sucks
'em in, but boy, you got to pay off."

"We paid off," said Burcke. "Here it comes."

"The horse act, right?"

"Wrong," said Burcke.

*Dark stage. Desk, pool of light. Zoom in, Burcke, jaw
clamped. In a face as sincere and interested as that, the
clamped jaw is pretty grim.*

BURCKE: Tonight the Heri Gonza show brings you a true
story. Although the parts are played by professional actors,
and certain scenes are shortened for reasons of time, you
may be assured that these are real events and can be proved
in every detail.

"What the hell is this?" roared Heri Gonza. "Did you air
this? Is this what went out when I was knocking myself out
with that horse act?"

"Sit down," said Burcke.

Heri Gonza sat down dazedly.

Burcke at desk. Lifts book and raps it.

BURCKE: This is a ship's rough log, the log of the Fafnir
203. How it comes to be on this desk, on your wall, is, I
must warn you, a shocking story. The Fafnir is a twelve-
cabin luxury cruiser with a crew of twelve, including stew-
ards and the galley crew. So was the 203, before it was re-
built. It was redesigned to sleep four with no room over,
with two cabins rebuilt as a small-materials shop and a bio-

logical laboratory, and all the rest taken up with power-plant, fuel and stores. The ship's complement was Dr. Iris Barran, mathematician—

Fade in foredeck of Fafnir, girl standing by computer.

Dr. George Rehoboth Horowitz, microbiologist—

Bespectacled man enters, crosses to girl, who smiles.

Yeager Kearsarge, pilot first class—

Kearsarge is a midget with a long, bony, hardbitten face.

He enters from black foreground and goes to control console.

Sam Flannel, supercargo.

Widen lighting to pass cabin bulkhead, discovering large man strapped in acceleration couch, asleep or unconscious.

"I got it," said Heri Gonza in the projection room. "A rib. It's a rib. Pretty good, fellers."

"It isn't a rib, Heri Gonza," said Burcke. "Sit down, now."

"It's got to be a rib," said Heri Gonza in a low voice. "Slip me a beer, I should relax and enjoy the altogether funny joke."

"Here. Now shush."

BURCKE: . . . mission totally contrary to law and regulation. Destination: Iapetus. Purpose: collection of the virus, or spores, of the dreaded children's affliction iapetitis, on the theory that examination of these in their natural habitat will reveal their exact internal structure and lead to a cure, or at the very least an immunization. Shipowner and director of mission: (*long beat*) Heri Gonza.

Fourteen hours out . . .

Fade Burcke and desk and take out. Dolly in to foredeck.

Horowitz crosses to side cabin, looks in on Flannel.

Touches Flannel's face. Returns to computer and Iris.

HOROWITZ: He's still out cold. The tough boy is no spaceman.

IRIS: I can't get over his being here at all. Why ever did Heri want him along?

HOROWITZ: Maybe he'll tell us.

Small explosion. High whine.

KEARSARGE: A rock! a rock!

IRIS: (*frightened*) What's a rock?

Kearsarge waddles rapidly to friction hooks on bulkhead, snatches off helmets, throws two to Horowitz and Iris, sprints with two more into cabin. Gets one on Flannel's lolling head, adjusts oxygen valve. Puts on his own. Returns to assist Iris, then Horowitz.

IRIS: What is it?

KEARSARGE: Nothing to worry you, lady. Meteorite. Just a little one. I'll get it patched.

From control console, sudden sharp hiss and cloud of vapor.

IRIS: Oh! And what's *that*?

KEARSARGE: Now you got me.

Kearsarge goes to console, kneels, peers underneath. Grunts, fumbles.

HOROWITZ: What is it?

KEARSARGE: Ain't regulation, 'sall I know.

Horowitz kneels beside him and peers.

HOROWITZ: What's this?

KEARSARGE: Bottom of main firing lever. Wire tied to it, pulled that pin when we blasted off.

HOROWITZ: Started this timing mechanism. . . . What time did it pop?

KEARSARGE: Just about 14:30 after blastoff.

HOROWITZ: Think you can get it off there? I'd like to test for what was in it.

Kearsarge gets the device off, gives it to Horowitz, who takes it into lab.

Cut to cabin, closeup of Flannel's helmeted face. He opens his eyes, stares blankly. He is very sick, pale, insane with dormant fear. Suddenly fear no longer dormant. With great difficulty raises head, raises strapped-down wrist enough to see watch. Suddenly begins to scream and thrash around. The releases are right by his hands but he can't find them. Iris and Kearsarge run in. Kearsarge stops to take in the situation, then reaches out and pulls releases. Straps fall away; Flannel, howling, leaps for the door, knocking the midget flat and slamming Iris up against edge of door. She screams. Kearsarge scrambles to his feet, takes off after Flannel like a Boston terrier after a bull. Flannel skids to a

stop by the lifeboat blister, starts tugging at it.

KEARSARGE: What the hell are you doing?

FLANNEL (*blubbing*): 14:30 . . . 14:30 . . . I gotta get out, gotta get out . . . (*screams*)

KEARSARGE: Don't pull on that, y'damn fool! That's not the hatch, it's the release! We got spin on for gravity—y'll pitch the boat a hundred miles off!

FLANNEL: Oh, lemme out, it's too late!

Kearsarge punches upward with both hands so unexpectedly that Flannel's grip is broken and he pitches over backward. Kearsarge leaps on him, twists his oxygen valve, and scuttles back out of the way. Flannel lumbers to his feet, staggers over to the boat blister, gets his hands on the wrong lever again, but his knees buckle. Inside the helmet, his face is purpling. Horowitz comes running out of the lab. Kearsarge puts out an arm and holds him back, and together they watch Flannel sag down, fall, roll, writhe. He puts both hands on helmet, tugs at it weakly.

HOROWITZ: Don't for God's sake let him take off that helmet!

KEARSARGE: Don't worry. He can't.

Flannel slumps and lies still. Kearsarge goes to him and opens valve a little. He beckons Horowitz and together they drag him back to the cabin and with some difficulty get him on the couch and strapped down.

HOROWITZ: What happened? I had my hands full of reagents in there.

KEARSARGE: Space nutty. They get like that sometimes after blackout. He wanted out. Tried to take the boat.

HOROWITZ: He say anything?

KEARSARGE: Buncha junk. Said, 14:30, 14:30. Said it was too late, had to get out.

HOROWITZ: That snivvy under the console popped at 14:30. He knew about it.

KEARSARGE: Did he now. What was it?

HOROWITZ: Cyanide gas. If we hadn't been holed and forced to put the helmets on, we'd've had it.

KEARSARGE: Except him. He figured to be up an' around lookin' at his watch, and when she popped, he'd be in the boat headed home and we'd keep blasting till the pile run

dry, som'res out t'ords Algol.

HOROWITZ: Can you fix those releases so he can't reach them?

KEARSARGE: Oh, sure.

Fade. Light picks up Burcke at the side.

BURCKE (as narrator): They got an explanation out of Flannel, and it satisfied none of them. He said he knew nothing of any cyanide. He said that Heri, knowing he was a bad spaceman, had told him that if it got so bad he couldn't stand it, he could always come back in the lifeboat. But if he did that, he'd have to do it before 14:30 after blastoff or there wouldn't be fuel enough to decelerate, start back, and maneuver a landing. He insisted that that was all there was to it. He would not say what he was doing aboard, except to state that Heri Gonza wanted him to look out for Heri's interests.

No amount of discussion made anything clearer. Heri certainly could not have wanted the expedition to fail, nor his ship hurled away from the solar system. They reluctantly concluded that some enemy of Heri Gonza's must have sabotaged them—someone they simply didn't know.

The weeks went by—not easy ones, by any means, in those close quarters, without any event except Iris Barran's puzzling discovery that the ship required no astrogator after all: what the veteran Kearsarge couldn't handle in his head was easily treated in the computer. Why, then, had Heri Gonza insisted on her cramming on astrogation?

Zoom in to Saturn until it fills a quadrant. String out the moons.

Heri Gonza watched the bridge sequence, as Saturn swept close and the moons rolled by like broken beads, and little Iapetus swam close. Iapetus is not a moon like most, round or oblate, but a rock, a drifting mountain some 500 miles in diameter. And before them was the solution to the mystery of the changing moonlight. Some unknown cataclysm has cloven Iapetus, so that it has one sheer face, nearly four hundred square miles of flat plain (or cliff, depending on how you look at it) made of pale gray basaltic material. Since Iapetus always maintains one face to Saturn, it always

appears brighter as it rounds the eastern limb, and dimmer as it goes west, the albedo of the flat face being much higher than the craggy ruin of the rest of its surface.

"Burckee, Burckee, Burckee ol' turkey," murmured the comedian in accents of wonder, "who the hell writes your stuff? Who writes your lousy, lousy stuff?"

Stock shot, Fafnir putting down tail-first on rocky plain, horizon washed out and black space brought down close. Rocks sharp-cornered, uneroded. Long shot, stabilizing jacks extending widest. Ladder out. Two suited figures ride it down, the other two climb down.

Closeup, all four at tail-base.

HOROWITZ: (*filter mike*) Check your radios. Read me?

ALL: Check. Read you fine.

HOROWITZ: Each take a fin. Walk straight out with the fin as a guide, and when you've passed our scorch area, get a rock scraping every five feet or so until you're far enough away that the horizon's a third of the way up the hull. Got that? No farther. (*Beat*) And I can almost tell you now, we aren't going to find one blessed thing. No virus, no spore, no nothing. My God, it's no more than twelve, thirteen degrees K in the shadows here. Anyway . . . let's go.

BURCKE: (*off*) Scratch and hop, scratch and hop. In this gravity, you don't move fast or push hard, or you'll soar away and take minutes to come down again. Shuffle and scratch, scratch and sweep, scratch and hop. It took them hours.

Closeup, Kearsarge, looking down.

KEARSARGE: Here's something.

Closeups, each of the other three, looking up, turning head at the sound of Kearsarge's voice.

HOROWITZ: What is it?

KEARSARGE: Scorch. A regular mess of it. Hell, you know what? Swope toppled his ship. I can see where he came down, then where he took off, scraping along to the big edge there.

FLANNEL: Wonder he didn't wreck her.

KEARSARGE: He did. He couldn't hurt the hull any in this gravity, but he sure as hell wiped off his antennae, because

there they are: landing, range, transmission—every one, by God. No wonder he came barreling in the way he did. You can't land a Fafnir on manual, but you can try, and he tried. Poor ol' Swopie.

HOROWITZ: Everybody over there by Kearsarge. Maybe Swope picked up something where he scraped.

Long shot of the four working around long scorch and scrape marks.

BURCKE: (off, narrating) They filled their specimen sacks and brought them aboard, and then for seventy-two hours they went through their dust and stones with every test Horowitz could devise. . . . He had been quite right in his first guess. The moonlet Iapetus is as devoid of life as the inside of an autoclave.

Cut to foredeck set, but up-ended, the controls at highest point, the floor what was the after bulkhead. Iris moving around with slow shuffle; setting out magnetized plates on steel table, each one hitting loudly. In background, Flannel fusses with small electron mike, watching screen and moving objective screws. Lifeboat blister open, Kearsarge inside, working.

Airlock cycles, opens, and Horowitz comes in, suited, with sack. He is weary. Iris helps with helmet.

HOROWITZ: I've had it. Let's get home. We can get just so duty-bound.

IRIS: What's this 'home'? I don't remember.

HOROWITZ: You for home, Kearsarge?

KEARSARGE: Any time you're through hoein' this rock.

HOROWITZ: What are you doing in there?

KEARSARGE: Just routine. Figured you might want to buzz around the other side with the boat.

HOROWITZ: No, sir. I came close enough on foot. I say we're done here. A man could sit home with a pencil and paper and figure out the density of sub-microscopic growth this place would have to have to bring any back on the hull. We'd be hip deep in it. The iapetitis virus didn't come from Iapetus, and that, friends, is for sure and official.

KEARSARGE: (off) Oh, my holy mother. (He pops out, putty-colored.) George, get over here.

IRIS: (curiously) What is it?

She goes over and disappears for a moment inside the boat, with Kearsarge and Horowitz. Off, she gasps. Then, one by one they climb out and stand looking at Flannel.

FLANNEL: What I got, blue horns or something?

HOROWITZ: Show him, Kearsarge.

Kearsarge beckons. There is a strange pucker of grim amusement on his craggy face.

KEARSARGE: Come look, little feller. Then you can join our club.

Reluctantly, the big man goes over to the blister and follows Kearsarge into the lifeboat. Dolly after them, swing in to the instrument panel, under it and look up.

Lashed to the projecting lower end of the main thrust control is a silver can with a small cylinder at the near end.

FLANNEL: (pointing stupidly) Is that . . . that the same thing that—

KEARSARGE: A little smaller, but then you don't need as much cyanide for a boat.

FLANNEL: (angry) Who the hell put it there? You?

KEARSARGE: Not me, feller. I just found it.

HOROWITZ: It's been there all along, Flannel. Kearsarge is right: you belong to the club too. You sure it was Heri Gonza told you to take the boat?

FLANNEL: Sure it was. He couldn't have nothing to do with this. (Suddenly it hits him) Jesus! I mighta—

HOROWITZ: We'll have plenty of time to talk this over. Let's pack up the testing stuff and haul out of here.

FLANNEL: (to no one) Jesus.

Heri Gonza lay back in the projection room and sipped his beer and watched the stock shot of a Fafnir taking off from a rock plain. "You really get all that glop out of that book, Burcke, m'boy?"

"Every bit of it," said Burcke, watching the screen.

"You know how it is in space, a fellow's got to do something with his time. Sometimes he writes, and sometimes it's fairy tales, and sometimes you can get a pretty good show out of a fairy tale. But when you do that, you call it a fairy tale. Follow me?"

"Yup."

"This was really what went out on the air tonight?"

"Sure is."

Very, very softly, Heri Gonza said, "Poor Burcke. Poor, poor ol' Burcke."

Closeup, hands turning pages in rough logbook. Pull back to show Burcke with book. He looks up, and when he speaks his voice is solemn.

BURCKE: Time to think, time to talk it over. Time to put all the pieces in the same place at the same time, and push them against each other to see what fits.

Fade to black; but it is not black after all: instead, starry space. Pan across to pick up ship, a silver fish with a scarlet tail. Zoom in fast, dissolve through hull, discovering fore-deck. The four lounge around, really relaxed, willing to think before speaking, and to speak carefully. Horowitz and Kearsarge sit at the table ignoring a chessboard. Iris is stretched on the deck with a rolled-up specimen sack under her head. Flannel kneels before a spread of Canfield solitaire. Horowitz is watching him.

HOROWITZ: I like to think about Flannel.

FLANNEL: Think what?

HOROWITZ: Oh . . . the alternatives. The 'ifs.' What would Flannel do if this had been different, or that.

FLANNEL: There's no sense in that kind of thinkin'—if this, if that. This happened, or that happened, and that's all there is to it. You got anything special in mind?

HOROWITZ: I have, as a matter of fact. Given that you had a job to do, namely to cut out and leave us with our cyanide bomb at the start of the trip—

FLANNEL: (*aroused*) I tol' you and tol' you that wasn't a job. I didn't know about the damn cyanide.

HOROWITZ: Suppose you had known about it. Would you have come? If you hadn't come, would you have tipped us off about it? And here's the question I thought of: if the first bomb had failed—which it did—and there had been no second bomb to tell you that you were a member of the Exit Club, would you have tried to do the job on the way home?

FLANNEL: I was thinkin' about it, about what to do.

HOROWITZ: And what did you decide?

FLANNEL: Nothin'. You found the bomb in the boat so I just stopped thinkin'.

IRIS: (*suddenly*) Why did that really make a difference?

FLANNEL: All the diff'nce in the world. Heri Gonza tol' me to get in the lifeboat before fourteen an' a half hours and come back and tell him how things went. Now if there was just *your* bomb, could be that Heri Gonza wanted you knocked off. There was an accident and it din't knock you off, and here I am working for him and wonderin' if I shoön't take up where the bomb left off.

IRIS: Then we found the second bomb, and you changed your mind. Why?

FLANNEL: (*exasperated*) Whata ya all, simple or somepin? Heri Gonza, *he tol' me to come back and tell him how it went*. If he tells me that an' then plants a bomb on me, how could I get back to tell him? A man's a fool to tell a guy to do somethin' an' then fix it so he can't. He's no fool, Heri Gonza I mean, an' you know it. Well then: if he din't plant my bomb, he din't plant your bomb, because anyone can see they was planted by the same guy. An' if he din't plant your bomb, he don't want you knocked off, so I stopped thinkin' about it. Is that simple enough for ya?

IRIS: I don't know that it's simple, but it sure is beautiful.

HOROWITZ: Well, one of us is satisfied of Heri Gonza's good intentions. Though I still don't see what sense it made to go to all the trouble of putting you aboard just to have you get off and go back right at the start.

FLANNEL: Me neither. But do I have to understand everything he tells me to do? I done lots of things for him I didn't know what they was about. You too, Kearsarge.

KEARSARGE: That's right. I drive this can from here to there, and from there to yonder, and I don't notice anything else, but if I notice it I forget it, but if I don't forget it I don't talk about it. That's the way he likes it and we get along fine.

IRIS: (*forcefully*) I think Heri Gonza wanted us all killed.

HOROWITZ: What's that—intuition? And . . . shouldn't that read "wants"?

IRIS: "Wants," yes. He wants us all killed. No, it's not intuition. It formulates. Almost. There's a piece missing.

FLANNEL: Ah, y'r out of y'r mind.

KEARSARGE: Doubled.

HOROWITZ: (*good-naturedly*) Shut up, both of you. Go on with that, Iris. Maybe by you it formulates, but by me it intuitions. Go on.

IRIS: Well, let's use as a working hypothesis that Heri Gonza wants us dead—us four. He wants more than that: he wants us to disappear from the cosmos—no bodies, no graves, no nothing.

KEARSARGE: But *why*?

HOROWITZ: Just you listen. We start with the murders and finish with the *why*. You'll see.

IRIS: Well then, the ship will do the removal. The cyanide—both cyanides—do the actual killing, and it hits so fast that the ship keeps blasting, out and out until the fuel is gone, and forever after that. We three are on it; Flannel crashes in a small craft and if anybody wonders about it, they don't wonder much. Is there any insignia on that boat, by the way, Kearsarge?

KEARSARGE: Always.

IRIS: Go look, will you? Thanks. Now, what about the traces we leave behind us? Well, we took off illegally so notified no one and filed no clearances. You, George, were already in hiding from Heri Gonza's persecutions; Kearsarge here is so frequently away on indeterminate trips of varying lengths that he would soon be forgotten; Flannel here—no offense, Flannel—I don't think anyone would notice that you're gone for good. As for me, Heri Gonza himself had me plant a story about going off secretly for some solitary research for a year or so. What's the matter, Kearsarge?

KEARSARGE: I wouldn'ta believed it. No insignia. Filed off and sanded smooth and painted. Numbers off the thrust block. Trade-name off the dash, even. I . . . I wouldn'ta believed it.

HOROWITZ: Now you'd better listen to the lady.

IRIS: No insignia. So even poor Flannel's little smashup is thoroughly covered. Speaking of Flannel, I say again that it was stretching credibility to put him aboard that way—unless you assume that he was put aboard like the rest of us, to be done away with. I certainly came under false pre-

tenses: Heri Gonza not only told me he needed an astro-gator for the trip, which he didn't, but had me bone up on the subject.

Now we can take a quick look at motive. George Horowitz here is the most obvious. He has for a long time been a thorn in the flesh of that comedian. Not only has he concluded that Heri Gonza doesn't really want to find a cure for iapetitis—he says so very loudly and as often as he can. In addition, George is always on the very verge of whipping the disease, something that frightens Heri Gonza so much that he's actually hoarding patients so George can't get to them. Also, he doesn't like George.

Why kill Flannel? Is he tired of you, Flannel? Did you boggle something he asked you to do?

FLANNEL: He don't have to kill me, Miss Iris. He could fire me any time. I'd feel real bad, but I wouldn't bother him none. He knows that.

IRIS: Then you must know too much. You must know something about him so dangerous he won't feel safe until you're dead.

FLANNEL: So help me, lady, there ain't a single thing like that I know about him. Not one. Not that I know of.

HOROWITZ: There's the key, Iris. He doesn't know he knows it.

KEARSARGE: Then that's me too, because if there's a single thing I know that he'd have to kill me for then I don't know what it is.

IRIS: You said "key." Lock and key. A combination of things. Like if you put what Flannel knows with what Kearsarge knows, they will be dangerous to Heri Gonza.

Flannel and Kearsarge gape at each other blankly and simultaneously shrug.

HOROWITZ: I can give you one example of a piece of knowledge we all have that would be dangerous to him. We now know that the disease virus does not originate on Iapetus. Which means that poor Swope was not responsible for bringing it to earth, and, further, the conclusion that the little Tresak girl—the first case—caught it from the wreckage of the space ship, was unwarranted.

FLANNEL: I brung that picture of that little girl standing

in the wreck, I brung it to Heri Gonza. He liked it.

IRIS: What made you do that?

FLANNEL: I done it all the time. He told me to.

HOROWITZ: Bring him pictures of little girls?

FLANNEL: Girls, boys . . . but pretty ones. I got to know just the ones he would like. He liked to use 'em on his show.

Iris and Horowitz lock glances for one horrified second, and then pounce all but bodily on Flannel.

IRIS: Did you ever show him a picture of any child who later contracted the disease?

FLANNEL: (*startled*) Wh . . . I dunno.

IRIS: (*shouting*) Think! Think!

HOROWITZ: (*also shouting*) You did! You did! The Tresak girl—that photograph of her was taken before she had the disease!

FLANNEL: Well, yeah, her. And that little blond one he had on the telethon that din't speak no English from Est'onia, but you're not lettin' me think.

HOROWITZ: (*subsiding*) And you didn't know what it was you had on him that he considered dangerous.

FLANNEL: What?

KEARSARGE: I remember that little blond girl. I flew her from Esthonia.

IRIS: Before or after she had the disease?

KEARSARGE: (*shrugging*) The kind of thing I never noticed. She . . . she looked all right to me. Real pretty little kid.

IRIS: How long before the telethon was that?

KEARSARGE: Week or so. Wait, I can tell you to the day. (*He rises from the chess table and goes to a locker, from which he brings a notebook. He leafs.*) Here it is. Nine days.

IRIS: (*faintly*) He said, on the telethon, three days . . . first symptoms.

HOROWITZ: (*excitedly*) May I see that? (*Takes book, riffles it, throws it on the table, runs to lab, comes back with cardboard file, fans through it, comes up with folder.*) Iris, take Kearsarge's book. Right. Now did he fly to Belem on the ninth of May?

IRIS: The sixth.

HOROWITZ: Rome, around March twelfth.

IRIS: March twelfth, March—here it is. The eleventh.

HOROWITZ: One more. Indianapolis, middle of June.

IRIS: Exactly. The fifteenth. What is that you have there?
He throws it down in front of her.

HOROWITZ: Case files. Arranged chronologically by known or estimated date of first symptom, in an effort to find some pattern of incidence. No wonder there was never any pattern. God in Heaven, if he wanted a clinic in Australia, cases would occur in Australia.

FLANNEL: (*bewildered*) I don't know what you all are talkin' about.

KEARSARGE: (*grimly*) I think I do.

IRIS: *Now* do you think you're worth murdering—you who can actually place him on the map, at the time some child was stricken, every single time?

KEARSARGE: (*huskily*) I'm worth murdering. I . . . didn't know.

FLANNEL: (*poring over the case file*) Here's that one I seen in Bellefontaine that time, she had on a red dress. And this little guy here, he got his picture in a magazine I found on the street in Little Rock and I had to go clear to St. Louis to find him.

Kearsarge hops up on a chair and kicks Flannel in the head.

FLANNEL: (*howling*) Hooo—wow! What you wanna hafta do that for? Ya little—

HOROWITZ: Cut it out, you two. *Cut it out!* That's better. We don't have room for that in here. Leave him alone, Kearsarge. His time will come. Heaven help me, Iris, it's been in front of my nose right from the start, and I didn't see it. I even told you once that I was so close because I could synthesize a virus which would actually cause the disease—but it wouldn't maintain it. I had this *idée fixe* that it was an extraterrestrial disease. Why? Because it acted like a synthetic *and no natural terran virus does*. Serum from those kids always acted that way—it would cause a form of iapetitis which would fade out in three months or less. *All you have to do to cure the damn thing is to stop injecting it!*

IRIS: Oh, the man, the lovely clever man and his family all over the world, the little darlings, the prettiest ones he could find, whom he never, never failed to visit regularly. . . . (*Suddenly, she is crying*) I was so s-sorry for him! Remember the night he . . . tore himself open to tell us he c-couldn't have k-kids of his own?

KEARSARGE: Who you talking about—Heri Gonza? For Pete's sake, he got an ex-wife and three kids he pays money to keep 'em in Spain, and another ex-wife in Paris, France with five kids, three his, and that one in Pittsburgh—man, that comedian's *always* in trouble. He *hates* kids—I mean really hates 'em.

Iris begins to laugh. Probably hysteria.

Dissolve to black, then to starry space. To black again, bring up pool of light, resolve it into:

Burcke, sitting at desk. He closes log book.

BURCKE: This is, I regret to say, a true story. The Fafnir 203 came in at night six days ago at a small field some distance from here, and Dr. Horowitz phoned me. After considerable discussion it was decided to present this unhappy story to you in the form written up by the four people who actually experienced it. They are here with me now. And here is a much maligned man, surely one of the greatest medical researchers alive—Dr. Horowitz.

HOROWITZ: Thank you. First, I wish to assure everyone within reach of my voice that what has been said here about iapetitis is true: it is a synthetic disorder which is, by its very nature, harmless, and which, if contracted, will pass away spontaneously in from two to twelve weeks. Not a single child has died of it, and those who have been its victims the longest—some up to two years—have unquestionably been lavishly treated. A multiple murder was attempted upon my three companions and myself, of course, but it is our greatest desire to see to it that that charge is not pressed.

BURCKE: I wish to express the most heartfelt apologies from myself and all my colleagues for whatever measure of distress this network and its affiliates may have unwittingly brought you, the public. It is as an earnest of this that we suffer, along with you, through the following film clip, taken

just two days ago in the I.F. clinic in Montreal. What you see in my hand here is a thin rubber glove, almost invisible on the hand. Fixed to its fingertips is a microscopic forest of tiny sharp steel points, only a few thousandths of an inch long. And this metal box, just large enough to fit unobtrusively in a side pocket, contains a jellied preparation of the synthetic virus.

Fade to:

Wild hilarity in a hospital ward. Children in various stages of iapetitis, laughing hilariously at the capering, growling, gurgling, belching funny man as he moves from bed to bed, Peep! at you, peep-peep at you, and one by one ruffling the little heads at the nape, dipping the fingertips in the side jacket pocket between each bed.

Dissolve, and bring up Burcke.

BURCKE: Good night, ladies, gentlemen, boys and girls . . . and . . . I'm sorry.

The lights came up in the projection room. There was nobody there with Heri Gonza but Burcke: all the others had quietly moved and watched the last few scenes from the doorway, and slipped away.

"You did air it?" asked the comedian, making absolutely sure.

"Yes."

Heri Gonza looked at him without expression and walked toward the stage door. It opened as he approached and four people came in. Flannel, Kearsarge, Horowitz, Iris Barran.

Without a word Flannel stepped up to the comedian and hit him in the stomach. Heri Gonza sank slowly to the floor, gasping.

Horowitz said, "We've spent a lot of time deciding what to do about you, Heri Gonza. Flannel wanted just one poke at you and wouldn't settle for anything else. The rest of us felt that killing was too good for you, but we wanted you dead. So we wrote you that script. Now you're dead."

Heri Gonza rose after a moment and walked through the stage door and out to the middle of acres and acres of stage. He stood there alone all night, and in the morning was gone.

THE SHORT-SHORT STORY OF MANKIND

by John Steinbeck

Maybe you go for Hemingway. Faulkner? Thomas Wolfe? (With me it's Dos Passos.) But no matter whom you pick for first place, Steinbeck is probably high up on your list; and for many people he is indisputably *the* realistic modern novelist.

What's he doing *here*?

I may as well say right off that this piece is *not* science fiction—or science fantasy, or “fantasy-fable” either, I'm afraid (though “fable” and “allegory” are what *Playboy* called it when they printed it).

But it stops just short of “future history” which would make it legit s-f. And it's pretty realistic, too. . . .

You could call it historically fantastic realism . . .

Or really historical fantasy . . .

Or *fantastically* realistic history . . .

Anyhow, it's *speculative*; also it's *satire*. And it's Steinbeck in an unexpected and delightful vein. So here it sits, behind the fiction, and before the fact. . . .

It was pretty drafty in the cave in the middle of the afternoon. There wasn't any fire—the last spark had gone out six months ago and the family wouldn't have any more fire until lightning struck another tree.

Joe came into the cave all scratched up and some hunks of hair torn out and he flopped down on the wet ground and bled—Old William was arguing away with Old Bert who was his brother and also his son, if you look at it one way. They were quarreling mildly over a spoiled chunk of mammoth meat.

Old William said, “Why don't you give some to your mother?”

“Why?” asked Old Bert. “She's my wife, isn't she?”

And that finished that, so they both took after Joe.

"Where's Al?" one of them asked and the other said, "You forgot to roll the rock in front of the door."

Joe didn't even look up and the two old men agreed that kids were going to the devil. "I tell you it was different in my day," Old William said. "They had some respect for their elders or they got what for."

After a while Joe stopped bleeding and he caked some mud on his cuts. "Al's gone," he said.

Old Bert asked brightly, "Saber tooth?"

"No, it's that new bunch that moved into the copse down the draw. They ate Al."

"Savages," said Old William. "Still live in trees. They aren't civilized. We don't hardly ever eat people."

Joe said, "We got hardly anybody to eat except relatives and we're getting low on relatives."

"Those foreigners!" said Old Bert.

"Al and I dug a pit," said Joe. "We caught a horse and those tree people came along and ate our horse. When we complained, they ate Al."

"Well, you go right out and get us one of them and we'll eat him," Old William said.

"Me and who else?" said Joe. "Last time it was warm there was twelve of us here. Now there's only four. Why, I saw my own sister Sally sitting up in a tree with a savage. Had my heart set on Sally, too, Pa," Joe went on uncertainly, because Old William was not only his father, but his uncle and his first and third cousins, and his brother-in-law. "Pa, why don't we join up with those tree people? They've got a net kind of thing—catch all sorts of animals. They eat better than we do."

"Son," said Old William, "they're foreigners, that's why. They live in trees. We can't associate with savages. How'd you like your sister to marry a savage?"

"She did!" said Joe. "We could have them come and live in our cave. Maybe they'd show us how to use that net thing."

"Never," said Old Bert. "We couldn't trust 'em. They might eat us in our sleep."

"If we didn't eat them first," said Joe. "I sure would like to have me a nice juicy piece of savage right now. I'm hungry."

"Next thing you know, you'll be saying those tree people are as good as us," Old William said. "I never saw such a boy. Why, where'd authority be? Those foreigners would take over. We'd have to look up to 'em. They'd outnumber us."

"I hate to tell you this, Pa," said Joe, "I've got a busted arm. I can't dig pits any more—neither can you. You're too old. Bert can't either. We've got to merge up with those tree people or we aren't gonna eat anything or anybody."

"Over my dead body," said Old William, and then he saw Joe's eyes on his skinny flank and he said, "Now, Joe, don't you go getting ideas about your pa."

Well, a long time ago before the tribe first moved out of the drippy cave, there was a man named Elmer. He piled up some rocks in a circle and laid brush on top and took to living there. The elders killed Elmer right off. If anybody could go off and live by himself, why, where would authority be? But pretty soon those elders moved into Elmer's house and then the other families made houses just like it. It was pretty nice with no water dripping in your face.

So, they made Elmer a god—used to swear by him. Said he was the moon.

Everything was going along fine when another tribe moved into the valley. They didn't have Elmer houses, though. They shacked up in skin tents. But you know, they had a funny kind of a gadget that shot little sticks . . . shot them a long way. They could just stand still and pick off a pig, oh . . . fifty yards away—wouldn't have to run it down and maybe get a tusk in the groin.

The skin tribe shot so much game that naturally the Elmer elders said those savages had to be got rid of. They didn't even know about Elmer—that's how ignorant *they* were. The old people sharpened a lot of sticks and fired the points and they said, "Now you young fellas go out and drive those skin people away. You can't fail because you've got Elmer on your side."

Now, it seems that a long time ago there was a skin man

named Max. He thought up this stick shooter so they killed him, naturally, but afterward they said he was the sun. So, it was a war between Elmer, the moon, and Max, the sun, but in the course of it a whole slew of young skin men and a whole slew of young Elmer men got killed. Then a forest fire broke out and drove the game away. Elmer people and skin people had to make for the hills all together. The elders of both tribes never would accept it. They complained until they died.

You can see from this that the world started going to pot right from the beginning. Things would be going along fine—law and order and all that and the elders in charge—and then some smart aleck would invent something and spoil the whole business—like the man Ralph who forgot to kill all the wild chickens he caught and had to build a hen house, or like the real trouble-maker, Jojo *au front du chien*, who patted some seeds into damp ground and invented farming. Of course, they tore Jojo's arms and legs off and rightly so because when people plant seeds, they can't go golly-wacking around the country enjoying themselves. When you've got a crop in, you stay with it and get the weeds out of it and harvest it. Furthermore, everything and everybody wants to take your crop away from you—weeds—bugs—birds—animals—men—A farmer spends all his time fighting something off. The elders can call on Elmer all they want, but that won't keep the neighbors from over the hill out of your corn crib.

Well, there was a strong boy named Rudolph, but called Bugsy. Bugsy would break his back wrestling but he wouldn't bring in an armload of wood. Bugsy just naturally liked to fight and he hated to work, so he said, "You men just plant your crops and don't worry. I'll take care of you. If anybody bothers you, I'll clobber 'em. You can give me a few chickens and a couple of handfuls of grits for my trouble."

The elders blessed Bugsy and pretty soon they got him mixed up with Elmer. Bugsy went right along with them. He gathered a dozen strong boys and built a fort up on the hill to take care of those farmers and their crops. When you take care of something, pretty soon you own it.

Bugsy and his boys would stroll around picking over the crop of wheat and girls and when they'd worked over their own valley, they'd go rollicking over the hill to see what the neighbors had stored up or born. Then the strong boys from over the hill would come rollicking back and what they couldn't carry off they burned until pretty soon it was more dangerous to be protected than not to be. Bugsy took everything loose up to his fort to protect it and very little ever came back down. He figured his grandfather was Elmer now and that made him different from other people. How many people do you know that have the moon in their family?

By now the elders had confused protection with virtue because Bugsy passed out his surplus to the better people. The elders were pretty hard on anybody who complained. They said it was a sin. Well, the farmers built a wall around the hill to sit in when the going got rough. They hated to see their crops burn up, but they hated worse to see themselves burn up and their wife Agnes and their daughter Clarinda.

About that time the whole system turned over. Instead of Bugsy protecting them, it was their duty to protect him. He said he got the idea from Elmer one full-moon night.

People spent a lot of time sitting behind the wall waiting for the smoke to clear and they began to fool around with willows from the river, making baskets. And it's natural for people to make more things than they need.

Now, it happens often enough so that you can make a rule about it. There's always going to be a joker. This one was named Harry and he said, "Those ignorant pigs over the hill don't have any willows so they don't have any baskets, but you know what they do?—benighted though they are, they take mud and pat it out and put it in the fire and you can boil water in it. I'll bet if we took them some baskets they'd give us some of those baked mud pots." They had to hang Harry head down over a bonfire. Nobody can put a knife in the status quo and get away with it. But it wasn't long before the basket people got to sneaking over the hill and coming back with pots. Bugsy tried to stop it and the elders were right with him. It took people away from the fields, exposed them to dangerous ideas. Why, pots got to be

like money and money is worse than an idea. Bugsy himself said, "Makes folks restless—why, it makes a man think he's as good as the ones that got it a couple of generations earlier" and how's that for being un-Elmer? The elders agreed with Bugsy, of course, but they couldn't stop it, so they all had to join it. Bugsy took half the pots they brought back and pretty soon he took over the willow concession so he got the whole thing.

About then some savages moved up on the hill and got to raiding the basket and pot trade. The only thing to do was for Bugsy, the basket, to marry the daughter of Willy, the pot, and when they all died off, Herman Pot-Basket pulled the whole business together and made a little state and that worked out fine.

Well, it went on from state to league and from league to nation. (A nation usually had some kind of natural boundary like an ocean or a mountain range or a river to keep it from spilling over.) It worked out fine until a bunch of jokers invented long-distance stuff like directed missiles and atom bombs. Then a river or an ocean didn't do a bit of good. It got too dangerous to have separate nations just as it had been to have separate families.

When people are finally faced with extinction, they have to do something about it. Now we've got the United Nations and the elders are right in there fighting it the way they fought coming out of caves. But we don't have much choice about it. It isn't any goodness of heart and we may not want to go ahead but right from the cave time we've had to choose and so far we've never chosen extinction. It'd be kind of silly if we killed ourselves off after all this time. If we do, we're stupider than the cave people and I don't think we are. I think we're just exactly as stupid and that's pretty bright in the long run.

From Science Fiction to Science Fact: The Universe and Us

Last year's edition of *SF* devoted a special section to non-fiction coverage of the beginnings of space flight. The innovation was so well received (I mean the section, though its subject is also doing pretty well) that it has been made a permanent feature of the anthology.

Space flight as such is now almost out of the range of fantasy or science fiction, but the adjustments to it, the challenge of new technology to human habits, the unknown potentials—for satisfaction, fear, delight—of the unguessed-at environments men will face beyond earth: this is the stuff that science fantasy is made of.

The present attainments and near-future promises of physical science leave little scope for speculative thought. It used to be a joke: "The difficult we do at once; the impossible takes a little longer." Now, I do not think any conception of the most imaginative mind, within the realm of physical science, could pose a problem that would cause the appropriate expert to answer, "No one knows" or "Never!" . . . just "I don't know, quite yet."

The great frontiers of the unknown now lie at man's own door. The urgent questions now are not "What is it?" or "How does it work?" or "How do we make it?"

Rather, we are asking, "Who are we?" and "What are we doing here?" . . . "Where are we going?" and "Why?" and "How will we make out when we get there?"

These are the themes of the best new science fantasy and also the working problems of the new generation of scientists. The first set of answers will derive, it seems, from studies now being made of man's chances for surviving out in space.

MAN IN SPACE

by Daniel Lang

In the welter of wordage published during 1958 about the prospects of manned space flight, very little was at once comprehending, comprehensive, and comprehensible. Mr. Lang's article combines these virtues with the authoritative documentation and stylistic excellence for which his reportage and the pages of *The New Yorker* are both known—and a certain skepticism of viewpoint is, I expect, a healthy thing.

In spite of all the serious investigation that our scientists and engineers are devoting to the possibilities of space travel, the would-be voyager to Mars or Venus need not pack his bags quite yet—or so I have gathered after looking into the progress of what is known to researchers, in and out of the government, as “the man-in-space program.” One thing that is holding up the program is the machine; engineers have been turning out better and better experimental rocket planes, but they are by no means ready to launch a really spaceworthy ship—a passenger-carrying vehicle capable of making its way through the earth's atmosphere into outer space and coming back to terra firma, itself and its cargo reasonably intact. Formidable as this part of the job is, however, most of the experts assume that, sooner or later, it will be accomplished; all that is required is technological improvement. Many scientists are a good deal more puzzled, I have discovered, over what to do about the one element in space travel that is technologically unimprovable. This element is none other than the space traveler—man.

Man's age-old physical and psychological needs and frailties, it seems—“the human factors,” as man-in-space experts call them—make him a rather poor risk for space voyaging, and some of the scientists I have talked to, or whose

treatises I have read, have expressed mild disappointment with man for not coming up to the astronautical mark. "Man's functional system cannot be fooled by gimmicks and gadgets," a comprehensive report on space flight got up for the Air University Command and Staff School, in Alabama, remarks. "He cannot be altered dimensionally, biologically or chemically. None of the conditions necessary to sustain his life-cycle functions can be compromised to any great extent." Wherever man is and whatever his circumstances, the report says, in effect, he simply must have many of the things that sustain him here below—air, food, and a certain amount of intellectual and physical activity. "Encapsulated atmosphere is what we're after," one scientist told me, and went on to explain that the space traveler—whether wearing a space suit in an airless cabin or, as most scientists would prefer, wearing ordinary clothes in a pressurized cabin—would have to have enough of the familiar earthly environment to see him through his voyage. "A spaceship," this scientist said, "must, you see, be a 'terrella,' a little earth."

The human factors in space travel are being studied on a broad front, and at every level from the immediately practical to the highly theoretical, by special groups set up within our armed services, universities, and private aircraft companies—groups like the Space Biology Branch of the Air Force Aero Medical Field Laboratory, in Alamogordo, New Mexico, and the Human Factors Engineering Group of the Convair Division of General Dynamics Corporation, in San Diego, California. The assignments these groups have taken on are myriad, and practically every one of them necessarily involves guesswork, or what one man calls "the vagueness of imagination," to a degree that most scientists abhor. Nonetheless, the job is being tackled, in its various aspects, by biochemists (who are concerned with the space traveler's physical care and feeding), radiobiologists (who worry about the effects of cosmic rays in outer space), sanitary engineers (who are figuring out how to dispose of wastes and insure the cleanliness of the terrella), anthropometrists (who measure the functional capacities of man), astrobotanists (who are attempting to discover what

sort of food, if any, the space man might find on other celestial bodies), and psychologists (who tend to doubt whether a man can roam extraterrestrially for years, months, or even weeks without going batty). Physiologists, chemists, pharmacologists, physicists, and astronomers are also making contributions to the man-in-space program, as are sociologists, whose responsibilities would seem to be remote at the moment but who foresee all kinds of catastrophic dilemmas in the future. "What will happen to a man's wife and children when he embarks on a prolonged space trip, perhaps for years, with every chance of not returning?" one scholar asked not long ago, in a symposium called "Man in Space: A Tool and Program for the Study of Social Change," which was held in the sober halls of the New York Academy of Sciences. "How long a separation in space would justify divorce, and if he should return, how will the [possible] Enoch Arden triangle be handled?" At the same symposium, Professor Harold D. Lasswell, of the Yale Department of Political Science, envisioned an even more drastic jolting of the status quo. He asked his learned audience to imagine what might happen if a spaceship's crew landed on a celestial body whose inhabitants were not only more than a match for us technologically but had created a more peaceable political and social order. "Assume," he said, "that the explorers are convinced of the stability and decency of the . . . system of public order that exists alongside superlative achievements in science and engineering. Suppose that they are convinced of the militaristic disunity and scientific backwardness of earth. Is it not conceivable that the members of the expedition will voluntarily assist in a police action to conquer and unify earth as a probationary colony of the new order?"

Before the space traveler can return to earth, with or without a police force at his back, he must go into space, and psychologists are now engaged in a sharp debate as to just what type of person would be best suited to embark on a long extraterrestrial trip. Addressing a meeting of the American Association for the Advancement of Science in Indianapolis a few months ago, Dr. Donald N. Michael, a psychologist who has been doing research on the effects of

automation, estimated that a journey to Mars might take about two and a half years, and concluded that our culture was unlikely to produce anyone with that much patience; good space men, he said, might be found in "cultures less time-oriented and more sedentary"—in a Buddhist monastery, perhaps, or among the Eskimos. Reasoning along other lines, Dr. Philip Solomon, chief psychiatrist at the Boston City Hospital, has come out for extrovert space voyagers. Like other medical men in all parts of the country, Dr. Solomon has been conducting what are called "sensory-deprivation experiments"—specifically, confining volunteers of various personality types in iron lungs to see how they bear up in isolation—and in a recent issue of *Research Reviews*, a monthly put out by the Office of Naval Research, he writes: "It appears that the self-centered introvert, whom you might expect to be quite content in the respirator, holed up in his own little world, so to speak, is precisely the one who breaks down soonest; whereas the extrovert, who is more strongly oriented to people and the outside world, can stand being shut off, if he has to, more readily. Sensory deprivation places a strain on the individual's hold on external reality, and it may be that those who are jeopardized most by it are those whose ties to reality are weakest."

Women have notoriously strong ties to reality, and for this reason, among others, some experts are convinced that they would fare better than men on a pioneering journey through space in cramped quarters. Another reason is that women live longer than men, and some of the envisioned journeys would take an extended period of time; still another is that women could probably weather long periods of loneliness better, because they are more content to while away the hours dwelling on trivia. Writing in the *American Psychologist* a couple of months ago, Dr. Harold B. Pepinsky, a psychology professor at Ohio State University, came up with the notion that the ideal space voyager would be a female midget with a Ph.D. in physics. When I asked a physiologist what he thought of this idea, he not only supported it heartily but embellished it. "It would be good if this midget woman Ph.D. came from the Andes," he said. "We're going to have to duplicate the traveler's normal

atmosphere in the ship, and it's easier to duplicate a rarefied fourteen-thousand-foot atmosphere than a dense sea-level atmosphere." The cards, though, seem to be stacked against any woman's blasting off ahead of a man. One important officer, Lieutenant Colonel George R. Steinkamp, of the Space Medicine Division at the Air Force School of Aviation Medicine, in San Antonio, Texas, said recently, "It's just plain not American. We put women on a pedestal, and they belong there." The pedestal apparently should be anchored firmly to the ground.

As for the Ph.D. in physics, I gathered that while it would definitely be an asset, some of the experts are worried lest a physicist might not know all he should about astronomy. An astronomer, on the other hand, might be weak in meteorology, and a meteorologist might well bungle some vital engineering problem. An engineer might know how to operate and maintain his ship but would probably not be able to cope with any illness that happened to befall him. The possibility of illness in outer space is receiving its share of attention, to judge by a paper that Drs. Donald W. Conover and Eugenia Kemp, of Convair's Human Factors Engineering Group, submitted to the American Rocket Society several months ago, in Los Angeles. "Space men and women must have almost perfect health in order to avoid bringing disaster on the flight by physical incapacity," they declared, and went on to say that even these paragons of fitness should "be trained in self-medication and, particularly, the use of antibiotics." From that point of view, the ideal traveler would seem to be a physician, but Professor Lasswell, the Yale political scientist, has a different idea. An anthropologist-linguist, he feels, would make a good space traveler, especially when it came to communicating with the inhabitants of remote celestial bodies; other candidates the Professor has nominated include individuals gifted with extrasensory perception—perhaps members of the Society for Psychical Research, Western parapsychologists, or Eastern mystics.

Naturally, all these difficulties would be cleared up if the vehicle carried a physicist, an astronomer, a meteorologist, an engineer, a physician, and the rest, but at the moment

it seems likely that the first spaceships will carry a crew of only one, because present computations show that half a ton of fuel and metal must be provided for every pound of cargo. Still, some farsighted psychologists are pondering the intangibles that would make a large spaceship a happy one. The crew members, living close to disaster at all times and needing all their resources to forestall it, will have to be able to get along with one another, and various experts have told me that this state of affairs will not be as easy to achieve as it might sound. One question they are mulling over is what size crew would prove most efficient and congenial, and the question, I learned, has its facets. A group of five or six, research discloses, would be better in some ways, and worse in others, than a smaller one. Studies now in progress at various universities, though their results are anything but definitive, seem to show that half a dozen men thrown together in close confinement tend to form a highly standardized, if miniature, community, taking on and retaining social patterns through a desire to conform. The members of a smaller group, being less concerned about neighborliness and conformity, are apt to attack the business at hand, whatever it may be, with greater zest and intelligence. "It's something of a dilemma," I was told by Luigi Petrullo, who heads up the Group Psychology Branch of the Office of Naval Research, an agency that has for many years observed the behavior of submarine crews. "The factors that make for harmony—a nice clubby atmosphere, if you will—won't necessarily make for efficiency, will probably lead to jangled nerves. The particular character of a mission, I suspect, will have a lot to do with determining the size of the crew."

Whatever the crew's size, its members will have no escape from one another's likes, dislikes, normalities, abnormalities, and day-to-day moods for weeks, months, or years, in which long stretches of boredom will be interrupted only by moments of stark terror. Such a situation, as the military services have discovered from observing the behavior of men assigned to long-drawn-out perilous missions, does not ordinarily make for camaraderie; indeed, familiarity may breed feelings even stronger than contempt. One of the

psychologists who pointed this out to me referred to a passage from "Kabloona," in which the author, Gontran de Poncins, a French anthropologist and explorer, describes his change of attitude toward a trader, Paddy Gibson, with whom he spent part of an arctic winter:

I liked Gibson as soon as I saw him, and from the moment of my arrival we got on exceedingly well. He was a man of poise and order; he took life calmly and philosophically; he had an endless budget of good stories. In the beginning we would sit for hours . . . discussing with warmth and friendliness every topic that suggested itself, and I soon felt a real affection for him.

Now as winter closed in round us, and week after week our world narrowed until it was reduced—in my mind, at any rate—to the dimensions of a trap, I went from impatience to restlessness, and from restlessness finally to monomania. I began to rage inwardly and the very traits in my friend . . . which had struck me at the beginning as admirable, ultimately seemed to me detestable.

The time came when I could no longer bear the sight of this man who was unfailingly kind to me.

In an effort to learn more about the way groups of men react to prolonged togetherness, the military services, some universities, and various aircraft companies have been incarcerating crews in mockup space gondolas right here on earth, and the findings, though inevitably sketchy, have, on the whole, been illuminating. After a day or two, most of the subjects—even pilots with considerable flight experience—begin to show signs of listlessness and frayed nerves. Several experiments of the sort have been conducted by the Air Force Aero Medical Laboratory, in Dayton, Ohio, each involving the isolation of a five-man crew for five days, and as the time wore on, the crews, whose talk was recorded, revealed a preoccupation with food that eventually bordered on the obsessive. I was told about these experiments by Charles Dempsey, the head of the laboratory's Escape Division, which is studying the habitation of space vehicles

and emergency escapes from them. "The men seemed to be living to eat rather than eating to live," he said. "Their schedule provided for fifteen minutes of work each hour for sixteen hours, with the remaining forty-five minutes spent sitting around, after which they had eight hours off duty, eighty per cent of this time spent in sleeping. At the start, they discussed everything under the sun. In due course, though, they just about talked themselves out, and then there seemed to be only one subject that still interested them—food. Each man had his own five-day supply of food to eat when he wished, and, as things turned out, practically every one of the men soon started watching what his companions were doing with their food. Each seemed uncertain whether he was using good judgment about his own supply—whether he was eating too much of it at once or too little. Living on the kind of schedule they did, their stomachs became confused, and they kept debating whether it was breakfast time or suppertime or what. Yes, food got to be quite a deal. I'd say it was on their minds three-quarters of the time they were awake."

The food that the earth-bound astronauts were given at the Aero Medical Laboratory was familiar, varied, and tasty, including such items as brownies and salted peanuts. In space, the voyager would be unlikely to have such interesting fare. In fact, no one knows at this point what he would have in the way of food. On the assumption that the spaceship would have automatic controls, Dr. John Lyman, associate professor of engineering at the University of California, has gone so far as to suggest that if a space man were bound for Mars, say, he might be given a still undeveloped drug that would lower his body temperature and put him to sleep until he got there; such a hibernating man, with his breathing and heart action slowed, would require relatively little food and water, and what he did need could be automatically injected into his veins. In an article in the *Bulletin of the Atomic Scientists*, Dr. James B. Edson, assistant to the director of Research and Development of the Department of the Army, goes even further, envisioning a synthetic nutrient that could make breathing as well as eating and drinking unnecessary. After speculating for a time

on how the nutrient might work, Dr. Edson does relent a bit. "It may, however, prove necessary," his article says, "to breath at least a little, so as not to get out of the habit."

In contrast to Dr. Lyman and Dr. Edson, some of the Navy's scientists take a decidedly old-fashioned view. With a conscious, lively space crew in mind, these men insist on a normal terrestrial diet, including all possible trimmings. "We do not completely understand why," Captain C. P. Phoebus, a physician assigned to the Naval War College, in Newport, has written, "but we have found in dealing with submariners that the mere provision of enough calories, bulk, vitamins and minerals, and other essentials is not enough to keep a man physically and mentally healthy. It is very important that some of these needs be supplied in the form of fresh food, that the types of food and cooking techniques be varied, that the diet be balanced, and that the food be as tasty as that served at home. If it is not, the crew's performance and morale are not at their best." And that, these Navy men seem to think, would be just as true in outer space as under water.

Captain Phoebus and his submariners notwithstanding, one type of nutrition that is being seriously considered is about as far a cry from blueberry pie as can be imagined. This is the botanical group called the algae, one of the earth's most primitive forms of vegetation. In many respects, algae would make the ideal food for the astronaut, though they might not appeal to his palate. Algae contain proteins, fats, and carbohydrates, and could easily be grown aboard the ship—in small tanks irradiated by intense light. Moreover, they might solve the difficult problem of disposing of human waste, by using it as fertilizer. And, to mention another of algae's virtues, they can photosynthesize—that is, re-form the molecules of carbon dioxide breathed out by the space traveler, thereby releasing oxygen. Less than two months ago, during the world's first international symposium on submarine and space medicine, which was held by the American Institute of Biological Sciences at the naval submarine base in Groton, Connecticut, some researchers reported the discovery of a new strain of algae that can increase itself by cell multiplication a thou-

sandfold daily; the previous high had been eight times. The taste of algae, it might be mentioned, varies; one strain, for example, has a black-peppery tang, and another tastes something like mushrooms. "Algae have it all over pemmican," one man who has sampled both told me. But he hadn't eaten algae month after month in a spaceship.

This whole scheme of spaceship farming is patterned after nature's cycle here on earth, where time and the sun's energy, through the chemical changes they bring about, convert animal wastes and dead plants into crops. "What better method [of producing food] is there than to emulate the system already found in existence on the earth?" is a rhetorical question asked in "Closed Cycle Biological Systems for Space Feeding," a paper put out by the Quartermaster Food and Container Institute for the Armed Forces, in Chicago. "Man will be supplied food, water and oxygen from biological and chemical systems. He will eat the food, turning out the same wastes in the spaceship that are produced on the face of the earth." One expert I met, Dr. Harvey E. Savely, director of the Aero Medical Division of the Air Force Office of Scientific Research, confessed to me that the prospect of having our space men grow and harvest algae strikes him as anachronistic. "To think," he said, "that we may develop so advanced a machine as a spaceship and then have to fall back on so primitive a calling as agriculture."

Of all the strange experiences that may await the astronaut, none will be quite so strange, the experts agree, as weightlessness. This phenomenon will occur as soon as the spaceship reaches a speed at which the rocket's centrifugal force cancels the pull of the earth's gravity, and when it does, the space man, whether settling into orbit or making for Venus or Mars, will know for certain that he has arrived in outer space. He will weigh nothing. The air in his cabin will weigh nothing. The warm carbon dioxide he breaths out, being no lighter than the air in the cabin, will not rise, so he will have to exhale forcibly. Momentum, the force whirling the ship on its course, will rule its interior as well, and with possibly weird results. All objects that are not in some way fastened down—a map, a flashlight, a pencil—will float freely, subjecting the space man to a

haphazard crossfire. If he were to drink water from an ordinary tumbler, the water might dash into his nostrils, float there, and drown him. Ordinary tumblers will not be used, however; plastic squeeze bottles will. ("The proper-size orifice is being worked out," I was told by Major Henry G. Wise, of the Human Factors Division, Air Force Directorate of Research and Development.) Far more startling than the movement of objects, though, will be the space man's own movements. Normally, in making a movement of any kind, a man has to overcome the body's inertia plus its weight; a weightless man has only the inertia to overcome, and the chances are that it will take a long time for his muscles to grow accustomed to the fact. "What would be a normal step on earth would . . . send the 'stepper' sailing across the cabin or somersaulting wildly in the air," the Air University Command and Staff School study declares. "A mere sneeze could propel the victim violently against the cabin wall and result in possible injury."

Actually, very little is known about weightlessness. Until a few years ago, it was something that man had experienced only in very special circumstances, and then for no more than a fraction of a second—at the start of a roller coaster's plunge, for example, or at the instant of going off a high diving board. With the man-in-space program moving along, however, weightlessness has been deliberately arranged in certain flights undertaken at the Air Force School of Aviation Medicine, in San Antonio; in these, jet planes, flying along a prescribed parabolic course, manage to escape the effects of gravity for as long as thirty seconds. The exposure to weightlessness, brief as it is, has had widely varying effects on the airmen. "The sensation can best be described as one of incredulity, or even slight amusement," a colonel with a great deal of flying experience has reported, ascribing this reaction to "the incongruity of seeing objects and one's own feet float free of the floor without any muscular effort." Another airman, who was a gymnast in college, was reminded of "having started a back flip from a standing position and then become hung up part way over—looking toward the sky but not completing the flip." The sensation, he said, gave him "no particular enjoyment

or dislike"—only "a feeling of indifference." Other airmen have found the experience extremely unpleasant—accompanied by nausea, sleepiness, weakness, sweating, and/or vertigo—and, to confuse matters, still others have discovered that their reactions differ on different flights. All told, one expert estimates, about a third of the subjects regard weightlessness as "definitely distressing," while a fourth regard it as "not exactly comfortable."

The experts realize, of course, that weightless voyages lasting a good deal longer than half a minute would have physical and mental results that can only be guessed at now. "Most probably, nature will make us pay for the free ride," one scientist has said, almost superstitiously. For one thing, a long trip would raise hob with a man's muscles. In any earthly condition of inactivity, no matter how extreme, they still have the job of resisting gravity, and without this they are bound to grow flabby. Moreover, the space man's sense of balance would be thrown out of whack; this sense is governed by a liquid in our inner ear, and without gravity that liquid, floating freely in the chambers of the ear, could not be relied on to do its work. Not only would the space man be uncertain of where he was in his cabin at any particular moment, I learned from Lieutenant Colonel Robert Williams, a consultant in neurology and psychiatry to the Surgeon General, but he would run the risk of losing his "body image." This image, Dr. Williams told me, is the deeply rooted conception that we all have of ourselves as a physical entity; it is one of the major constituents of our equanimity. "Without a body image," he went on, "a person has difficulty in determining what is inside oneself and what is outside, in distinguishing one's fantasy life from one's real environment. In losing it, we face a possible complete disruption of personality."

Assuming that the space traveler returns to earth with his personality undamaged, other difficulties may be in store for him. "A man who has been weightless for a couple of weeks would find it as hard to move around as a hospital patient taking his first steps after a long siege in bed," Dr. Savely told me. "If he were to travel in a cooped-up posture over a long period of time—and, for all we know now, that may

be the only way he can travel—the whole architecture of his skeleton might change. Of course, we simply cannot allow that to happen.” In view of such forebodings, it is not surprising that the man-in-space people are seeking to avoid weightlessness, altogether or in part, by developing an artificial substitute for gravity, but they don’t seem to have made much headway. According to one scheme, the space man’s cabin would be attached to the rocket by a long cable and would be swung around it continuously, thus creating a field of gravity that would restore the passenger’s weight and, presumably, his efficiency. Discussing this in the *Scientific American*, Dr. Heinz Haber, of the Air Force School of Aviation Medicine, guesses that it would work only as long as the passenger stood absolutely still. “Every voluntary movement,” he writes, “would give the traveler the peculiar illusion that he was being moved haphazardly.” Another approach would be to have the astronaut tread a magnetized floor in iron shoes, but Dr. Haber isn’t too sanguine about this one, either. Not only would the magnetism throw off the ship’s electronic instruments, he points out, but it would “probably add to the traveler’s confusion, for while his shoes would be attracted to the floor, his non-magnetic body would not.”

If the problem of weightlessness is solved, the pilot may know where he is in the cabin, but, owing to the vastness of space, he will still be uncertain of his whereabouts in the universe. This will be so, I was told, regardless of how informative the ship’s instrument panel may be. A trip to Venus, around it, and back to earth would require a million miles of travel every day for three years, Dr. Seville Chapman, director of the Physics Division of the Cornell Aeronautical Laboratory, told me, and went on to say that the human mind may find the simple statistics of space flight baffling. “Suppose I tell you that our nearest star, Proxima Centauri, is four and two-tenths light-years away, a light-year being the distance a beam of light travels in twelve months at about a hundred and eighty-six thousand three hundred miles per second,” he added. “Just what does that mean to you?” (Compared to such destinations, writes Major General Dan C. Ogle, the Surgeon General of the

Air Force, our present space-travel aspirations—merely reaching the moon, for example—are “relatively provincial,” taking in no more than “our own back yard.”) Certainly nothing the space man will see is going to make him feel at home. He will have no horizon to look out on; in fact, he will be engulfed by blackness, for space has none of the air particles that diffuse the sun’s rays to give us our daylight. In this nightlike setting, the sun itself will be painfully brilliant, and the constellations will seem to be spread out flat and to take on bizarre shapes. There will be stars both above and below, but they will not twinkle, for twinkling is caused by the same air particles. They will appear, rather, as steady points of light, and in their true colors—red, blue, yellow, white.

The ship will be moving at well over a hundred times the speed of sound, but it will be breaking no sound barriers; air is needed to carry sound, and seventy-five miles up, there is no such thing as a sound wave. And no matter how fast he is going, the space man will be unaware of moving at all. Speed itself will take on new meaning for him. He will not be able to measure it as an airplane pilot can; the speed that a plane’s indicators show is computed on the basis of air resistance and altitude above sea level. “In space, there is no air and no sea, so most of the pilot’s old indicators won’t mean a thing up there,” I was told by Dr. Max W. Lund, head of the Engineering Psychology Branch of the Office of Naval Research. “Instrument panels will have to be redesigned so that they show not miles per hour but simply the passage of minutes, hours, days, or even fractions of light-years. And, of course, that isn’t all. Take the matter of destination. An approach to a point somewhere in space won’t be made in a straight line, you know—nothing like the way we fly from one city to another. Celestial bodies don’t stand still; the spaceship will have to describe a parabola, and we’ve been testing a screen that would show the space pilot the proper curve to follow in order to reach his destination. In fact,” he went on, “we might even devise a screen that could flash him the answers to broad, vital questions like ‘Where am I?’, ‘How am I doing?’, and ‘What should I do next?’ He’s going to be under a great

strain, and his mind shouldn't be cluttered with more detailed information."

The space traveler will be under a very great strain indeed if he lets his mind dwell on the dangers surrounding him. For the first part of the journey, at least, cosmic rays will be bombarding the ship without letup, and the space pilot may return to earth—if he returns at all—a physically impaired man. One authority, Dr. Hermann J. Schaefer, of the Navy School of Aviation Medicine, declared in the course of a California symposium last year that "not even informed guesses are possible" concerning the power of cosmic rays in space, but some idea of his respect for those rays can be deduced from his warning that "commercial airlines should not risk flight above ninety thousand feet, as they could not prove that any mutations or stillbirths following such flights were not caused by cosmic radiation." Farther out in space, the pilot might run into meteors, which, according to the Air University study, would present "an additional psychological problem to the would-be space traveler"—to say nothing of a physical problem. Some meteors are the size of a pea, and these, the study estimates, would score no more than "two hits per month per spaceship." Still, they might puncture a ship, causing a loss of pressure and possibly injuring or killing the traveler. But there are also meteors weighing tons and flying at speeds of up to three hundred and sixty thousand miles an hour, and the study notes that a hit by one of them "means sudden death." Another depressing consideration for the space man is that outside his ship—which may seem to him no more than a cockleshell—the temperature will range from 67 degrees below zero to 26,000 degrees above. As the Air University study observes, "The prospect of being cooked alive is not an attractive one."

Inside his cabin, the space man—if, of course, he is not in hibernation—may find temporary distraction from his lethal surroundings in the performance of his chores. He will have to check his cabin for pressurization, temperature, and humidity, as well as for noxious gases given off by the ship's equipment and by his own metabolism; he will have to watch his oxygen supply, perhaps keeping track of the

photosynthetic process by which it is being maintained; and every now and then, depending on his course, he may need to provide his ship with a rocket assist by letting out a charge of fuel. Essentially, though, the space pilot will be a passenger, a man wafted through the dark, silent emptiness by momentum, and he will have a great deal of time on his hands. All that leisure is a matter of concern to the experts. Our senses must be stimulated or they will die, and in space there won't be even the simplest things that ordinarily keep a man's senses alert—the day's changes in temperature, for instance, or the different pressures we experience when we lie, sit, stand, and move. Ways of keeping the space man alert are being considered, and one of them, I was told by Dr. Richard Trumbull, head of the Physiological Psychology Branch of the Office of Naval Research, will be a system of "programing" his time. The idea is to give the space traveler a reasonably full schedule of things to do, at fixed times—including made work, self-study courses, and such recreational activity as listening to records and playing pinball.

If the space man is in a pressurized cabin, one big advantage he will have is that sound will travel normally, but if he is in an airless cabin, rigged up in his space suit, the only sounds he is likely to hear are those he makes himself, and the sound of his breathing might be as loud to him as Niagara. The silence prevailing in such a cabin, I was told, might be comparable to that of an anechoic chamber—a super-soundproof room, with walls that do not reflect sound, that researchers use for testing an individual's ability to withstand one form of sensory deprivation. Lieutenant Bruce E. Pinc, a physiologist who spent an hour in an anechoic chamber at the Aero Medical Laboratory in Dayton, told me that he would far rather find himself in "a high-stress situation where you don't know if the equipment will work but where you're at least in touch with people." Nor did he think his reaction was exceptional. "A psychiatrist who had been testing others at the lab tried the chamber himself, and in a matter of minutes he was so disturbed that he had to be let out," Lieutenant Pinc told me. "He was disgusted with himself. He kept muttering

that he had to face something in himself that he hadn't known about before."

In the silence and isolation, the space man is likely to be afflicted with hallucinations; he may see strange shapes and hear strange voices. That, at least, was the experience of a group of students at the University of Texas who voluntarily took part in an isolation experiment, and one report prepared by General Dynamics says that it will be necessary "to convince future space men that the hallucinations they may experience are the normal responses of . . . isolated people and not a cause for worry." Paradoxical as it may seem to the layman, ear surgery has been proposed as a method of forestalling visual illusions, and nerve-soothing drugs are being studied, as well as drugs to regulate the metabolic rate and the appetite. Another effect of isolation is profound fatigue, I was told, and here, again, it is hoped that drugs may be the answer, though a recent experiment with one powerful substance would seem to indicate the need for further research. The experiment has been described in a paper called "Fatigue, Confinement, Proficiency and Decrement," by Dr. George T. Hauty, of the Department of Experimental Psychology at the Air Force School of Aviation Medicine. A group of subjects used the stimulant to good advantage for twenty-four hours, Dr. Hauty discloses, but then delusions and hallucinations set in and proficiency vanished. "Since these operations [the delusions and hallucinations] occur with a normal sensory environment," he concludes, "it may be that such will occur to a greater degree in a closed ecological system associated with sensory deprivation as it is found in space flight with nullified gravitation [weightlessness], in a hermetic cabin, surrounded by the perpetual silence of space."

Perhaps the greatest danger of all is that the space man will fall victim to the "breakoff phenomenon"—an eerie and sometimes fatal by-product of isolation and boredom, which, according to a paper published in the *Journal of Aviation Medicine*, has caused some airplane pilots, flying well within the confines of the earth's atmosphere, to experience an unsettling "loss of identification with the earth." Upon becoming thus disconnected from the home planet,

the flier grows uninterested in survival and falls into something like a trance, staring with apparent concentration at his instruments or out his window. Skin divers, Dr. Trumbull told me, undergo a counterpart of the breakoff phenomenon in what Jacques-Yves Cousteau, the French writer and underwater explorer, has called "the rapture of the depths"—a beckoning power that more than one diver has heeded, with fatal results. Colonel David G. Simons, new chief of the Space Biology Branch of the Aero Medical Field Laboratory, in Alamogordo, experienced the break-off phenomenon in 1956, when he made his famous balloon ascent to an altitude of a hundred thousand feet. In describing the sensation to me, he likened it to the grip of a daydream. Judging only by his own experience, he said, he doubted whether the breakoff phenomenon would trouble any space traveler who managed to keep occupied. "When I was busy—and if ever anyone was busy, for thirty-two hours I was, what with making observations and reading dials and maps—I wasn't bothered by breakoff," he said. "But when I was tired and took a short break, I did feel that peculiar sense of detachment."

Even if the grand objective of a man in space is not attained for a long time to come, many of the scientists on the project are convinced that their work will bring about some fairly immediate benefits on earth. Animals that are to be catapulted into space in the near future, for instance, will have instruments attached to their bodies that will send back data on their physiological reactions, and these instruments—very possibly like those that were attached to the late Laika—may have their medical uses here and now. Heart action, brain waves, changes in both deep and superficial reflexes, and a wide variety of other information will be recorded, and the effort to develop instruments for this purpose, in the opinion of General Ogle, is hastening the improvement (the miniaturization, for one thing) of many appliances used in terrestrial diagnostic procedures. Moreover, he said, devices that will eventually be used for transmitting data from spaceships may soon be used to send information to centralized hospitals, where panels of specialists can diagnose difficult cases no matter how far away

the patients are. "Maybe they'll save the life of an Ozark woman whose hill doctor is stumped," General Ogle remarked. Another doctor general, Don Flickinger, who is director of Life Sciences for the Air Research and Development Command, told me that wired monkeys, mice, and rats have already been rocketed and ballooned to high altitudes, though within the earth's atmosphere, and these, he said, may one day furnish leads for cancer research. He was particularly interested in the fact that certain black mice, dispatched from the Holloman Air Force Base, have white streaks in their fur where cosmic rays hit it. The black fur has never grown back, and this interests the General. "The white streak isn't just an ordinary burn," he said. "It represents a deleterious transfer of energy from ray to rodent, and it produces a basic alteration in cell function, though the cells continue to live. Well, what the cancer-research people are doing, to put it in basic terms, is to find out all they can about what influences and stimulates and changes the cell."

Another study that has been speeded up by the man-in-space program is that of the stress hormones, like adrenalin, which accelerate our mental processes and quicken our reflexes. Fear triggers the flow of adrenalin, and adrenalin thereupon intensifies some of the side effects of fear—a faster heartbeat, for instance, and a tendency of the blood to clot. Now some scientists are calculating that if a man were to be given small doses of the stress hormones, he might develop a tolerance for them, and the dangerous effects of anxiety would be brought more or less under control—an achievement that, an Air Force physiologist told me, would benefit people here as well as out in space. "Certainly a space man is going to get the quakes," he told me, "but no worse than those poor wretches who were tossed to the lions in ancient Rome. A fellow can get just so scared and no more." As various medical discoveries give us increasing control over the nervous system, General Flickinger said, it may become possible to predict human performance under pressure. "This question is a dilly," he said. "To tackle it, one has to deal with the whole spectrum of personality, from a genius to an African Bushman, say—a

simple fellow with a stomach that tells him he's hungry and eyes that tell him when the sun goes down. We know right now that if the heart does this and the cerebral cortex that, then, as a functional organism, a particular fellow can do this and that. But to translate this into terms of human performance, of what he *will* do when the chips are down—that's something else again. It's possible that I will have a hand in picking our first space operator, and in any case he'll surely be someone who has passed all the tests and who has a record of behaving well under stress. But how he'll behave once he gets up there—all we can do is hope."

Interesting though the terrestrial by-products of space research may be, the experts are concerned principally with the big prize. They want a man in space, and nothing less will do. Some of them have even begun to wonder exactly why. Some laymen are intrigued by the idea that space stations might have a military value, but not many scientists. In fact, Dr. Lee A. DuBridge, president of the California Institute of Technology, speaking at the Second Symposium on Basic and Applied Science in the Navy, held a few months ago in San Diego, dismissed the whole idea. If any military commander looks forward to launching missiles from Fortress Moon, Dr. DuBridge said, "Well, more power to him! He'll find the temperature a bit variable—boiling water by day, dry ice by night. And the days and nights are each two weeks long! He will find the lack of air, water and any appreciable or usable source of energy a bit inconvenient. And he will be bothered by the logistic problem of shooting his materials and supplies and weapons and personnel up there in the first place. Why shoot a load of explosives plus all auxiliary equipment two hundred and forty thousand miles to the moon, then two hundred and forty thousand miles back to hit a target only five thousand miles away? I'll guarantee to shoot a thousand missiles from the U.S. to any point on earth while our moon man is waiting twelve hours, more or less, for the earth to turn around and bring the target into shooting position. Finally . . . a bomb projected on a zero-angular-momentum path from the moon to the earth will take just five days to get there. . . . And we will hope the bombardier can figure correctly

which side of the earth will be *up* by then."

To Dr. Edson, the assistant to the director of Army Research and Development, the exploration of space presents itself not as a potential means of mutual annihilation but as a chance—perhaps our last—to perpetuate the race. His position is that if we can no longer take to the hills, perhaps we can take to the planets. "In olden days," he told me, "a defeated people could always find a new green valley in which to start life afresh, but that is hardly feasible today. I see but two approaches to our plight. One is to reduce human destructiveness through some international plan. The other is the old one of finding a new green valley, of expanding the range of human habitat, and this can be done only through astronautics. People sense that the race is in peril, and this, I believe, is a powerful, if unstated, reason for the widespread interest in space and space travel."

Colonel John Paul Stapp, chief of the Aero Medical Laboratory in Dayton and the man who, a few years back, rode a rocket sled at nearly the speed of sound, suspects that "survival euphoria" may be at the bottom of it all—a desire to win out over the near-death that a space journey would involve. "The Chinese say that narrow escapes are like cutting off the Devil's tail," he told me, and I was not surprised when I learned later that he has already volunteered to go into space if and when the time comes. A colleague of his had a less adventurous approach. "Live, intelligent individuals have got to go up or we won't get the information we need," he said. As for General Ogle, he told me that the urge to send a man up is largely explained by half a sentence from the President's Science Advisory Committee's "Introduction to Outer Space," a White House document issued last spring: "... the thrust of curiosity that leads men to try to go where no one has gone before." Then, perhaps visualizing a man in space with an algae garden and a still unknown defense against weightlessness, he invoked another quotation, this one from Einstein: "The fairest thing we can experience is the mysterious. It is the fundamental emotion which stands at the cradle of true science. He who knows it not and can no longer wonder, no longer feel amazement, is as good as dead."

ROCKETS TO WHERE?

by Judith Merrill

"In a free world, if it is to remain free, we must maintain, with our lives if need be, but surely by our lives, the opportunity for a man to learn anything. . . . We need to cherish man's curiosity, his understanding, his love, so that he may indeed learn what is new and hard and deep. . . ."

"Nobody and nothing under the natural laws of this universe impose any limitations on man except man himself."

The first quotation is from an interview with J. Robert Oppenheimer in *Look* magazine last year. The second is from the "Three Fundamental Laws of Astronautics," as set forth in a publication of the American Rocket Society by Krafft A. Ehricke (theorist-designer for the General Dynamics Corporation, and the man responsible for much of the planning that has gone into our ICBM's, as well as the solving of the re-entry problem and the new plans for a manned orbital vehicle).

Taken together with the words of the late Albert Einstein at the close of the preceding article, these excerpts comprise a potent statement of the essential philosophy of the scientist, a philosophy which has perhaps become essential to *all* thinking citizens in the "Age of Space."

The sense of wonder, the desire to know; the will to work at finding out; freedom to learn—but even more vitally the inward freedom implicit in the conviction that man's capacity for curiosity and for endeavor is the only measure of his potential growth: these are the tenets of world sanity and human survival now. (As ever—but now more than ever.)

To the extent that we can cherish curiosity (learn to question the obvious, rather than accept unthinkingly), cherish understanding (the *why?* and *wherefore?* . . . not just the *who-what-where-when-how*) and cherish love (learn that we need each other more than we need fear each other)—to the extent, in short, that “scientific man” can become *thoughtful man*—to this extent only can we hope to outlast our own powers of destruction.

I understand that a new model Detroit automobile takes eighteen months or more from the drawing board to the dealer’s display room. It is eighteen months, as I write this, since the launching of *Sputnik I*. In that brief time, we have witnessed so many further “breakthroughs” on so many scientific fronts (not necessarily connected with space flight at all) that to attempt even to summarize them here would be absurd. (The headline in my morning paper said today: *PIONEER IV NEARS MOON ON WAY TO DATE WITH SUN!*) The record of physical accomplishment, here and abroad, has been so steadily spectacular that I think most of us *have* lost the faculty for amazement—at engineering feats. But there is still cause for wonder (and lots of it) in another sphere—and that is in the unmeasured, and as yet barely recognizable capacity of the human being for intellectual, spiritual, and emotional attainment.

“The readjustment of attitudes toward the universe” made necessary by the immediate prospect of space flight was compared to “the beginning of the readjustment of man to a round instead of a flat earth,” by *The New York Times’* science writer, Richard Witkin, just last year.

I do not think he overstated. And what he asked for was not far short of a miracle—considering that the four hundred years since Copernicus has been inadequate to sell mankind in general on the existence of the solar system.

Not even that comparatively small segment of humanity that we call “Western Culture” was entirely convinced. At least, one generation back, in Arkansas, a teacher could—and did—lose his position for instructing his pupils in contradiction of Solomon’s clearly stated biblical precept that

"the earth is flat, has four corners, and is the center of the universe." (I quote from the decision of the presiding Justice of the Peace. Whether the Copernican heresy is countenanced today in the same small community just south of Little Rock, I do not know.)

We needed a miracle, and it seemed we were little likely to be given one. (Modern miracles have been moved from the Handout Department to Do-It-Yourself.) The truly amazing and heartening thing is that we *are* showing signs of producing it—eventually.

The prevailing pre-*Sputnik* attitude toward space ran a gamut from tolerance to hilarity.

"Before *Sputnik*, it was considered bad taste for the military to mention space," Wernher von Braun said in a *Life* interview.

"The long-time dream of little children has come true," one Boston paper started its feature piece on the first satellite. Most of the press preferred to say "science-fiction dream."

A rather self-consciously courageous editorial in *Newsweek* (for Oct. 21, 1957) proclaimed our entry into the Age of Space . . . "whether we like it or not." And plenty of people did *not*—especially if, as seemed inevitable, there would be Russians up in heaven too.

But even in those first few weeks, the job of psychological retooling had begun. The same issue of *Newsweek*, for instance, carried a full-page advertisement headed, "Instrumentation—stepping stone to the stars"; and under a science-fictiony illustration, in dignified text, came a pitch for the long-range investment policies of the First National City Bank of New York! *The New Yorker* (dated two days earlier) had an ad with a starmap, a spacesuit, and a map of Florida, saying, "The earth has now launched its first man-made satellite . . . when the rockets take off for outer space . . . [it will be] . . . only natural to stop at your nearest 'moon' and ask the man for a free Rand-McNally space chart."

It took the nation's publishers practically no time at all to get onto the same good thing (whether they liked it or

not). The newspapers poured out a deluge of I.G.Y. and Vanguard promotional pièces—some rewritten, some pulled fresh from the files of the past two years. Hot on their heels, the weekly news magazines beat the bushes of industry, government, and universities for fugitive eggheads to “expertize” for the “news analysts.” (I wonder if anyone has calculated whether the total energy expended by physicists in interviews during October–November, 1957, would have been sufficient to lift a lunar probe?)

By now, of course, there is hardly a publication in the country that has not featured some sort of something about space. And a whole new category of publishing has been born, ranging from comic books and *True Space Secrets* (one issue of which contains a revealing article entitled “Sex in Space”) to the *Washington Space Letter* (subscription, \$25 quarterly, \$75 the year, as advertised in the *Times* financial section, for manufacturers who want “space contracts”) and the *Space Journal* published in Huntsville, Ala., by the Rocket City Astronomical Association (and featuring such sensational articles as “The Purpose of Man in the Universe”).

From a standing (if not sitting-down, or sound-asleep) start eighteen months ago, we have covered a truly fantastic stretch of psychological ground. The staggering fact is that today the American public as a whole has come to accept the imminence of space flight as a reality no less tangible than, say, the likelihood of another World Series next year—and hardly less exciting, either, if probably not quite so enjoyable. (I wonder, though, what might happen if someone were to start some office pools on the next series of Florida vs. California rocket launchings?)

I wonder, too, whether *sound asleep* was not after all the best way to speak of the national state of mind two years ago? Asleep, and *dreaming*? Whether you thought of it as childish or inspired, science-fictional, scientific, ennobling or illusory, the “dream” was there—as far back as man’s memory goes. Our language, folklore, and religion are all full of it. Ambitious, we “hitch our wagon to a star.” Demanding, we “want the moon on a platter.” Happy, we sit

"on top of the world." Prayerful, we seek eternal paradise—in heaven.

Perhaps this new reality is easier to accept than some others because it *has* the quality of awakening from a dream? Let us hope so: once fully awakened, we cannot but perceive, and accept, the equal reality of global brotherhood—and thus end forever the nightmare of global war.

THE THUNDER-THIEVES

by Isaac Asimov

S-f writers are restless types, generally. They seem to come from—and be forever going off to—bizarre employments and unlikely places. Even inside the field there are few "name writers" who have not at some time switched teams, and tried their hands at editing or criticism.

Dr. Asimov lives quietly in Boston, and his career as a Professor of Biochemistry is just what one might expect (but seldom find) in a science-fiction writer. He has never edited a magazine or conducted a review column. Apparently he is content with two fictional personalities (the other is juvenile author Paul French). Co-author of five (at last count) biochemistry textbooks, Isaac Asimov has a growing reputation for non-fiction science writing. As a notorious composer of hoax and spoof articles, he is among the leaders of the slim ranks of s-f humorists. He is the author of many, many short stories, and a versifier and parodist of note.

The verse reprinted here, which goes to the tune of "The Flowers that Bloom in the Spring," was first published in *Future Science Fiction*. The article following was written especially for this book.

The Sputniks that fly in the sky, tra la,
Bring promise of space-flight quite soon.
It's plain that the rockets will try, tra la,
With burning and whooshing to hie, tra la,
To a quick rendezvous on the Moon—
To a quick rendezvous on the Moon.
And that's why excitedly all of us cry,
Just think of the Sputniks that fly in the sky,
Just think of the Sputniks—
Just think of the Sputniks—
The Sputniks that fly in the sky.

The Sputniks that fly in the sky, tra la,
Are stealing our very best plot.
As on through the vacuum they ply, tra la,
With space-flight as easy as pie, tra la,
S. F. will be going to pot—
S. F. will be going to pot.
And that's why we dolefully whimper and sigh,
We'll sue those damn Sputniks that fly in the sky,
We'll sue those damn Sputniks—
We'll sue those damn Sputniks—
The Sputniks that fly in the sky.

Twenty years ago, I wrote a science-fiction story called "Trends." It dealt with a man who was building a spaceship which would take him to the Moon. The ship, alas, blew up in its first attempt and there was an outcry against him and space-flight in general. My hero, who survived, went into hiding, built another ship in secret, shot himself to the Moon, circled it, and returned safely.

Now I have lived to see events not only spoil this plot but make it seem more than faintly ridiculous.

What! A spaceship built in secret by one man? Space-flight with the military not interested? (There wasn't a single general in my story.) No countdown? No radiation bands in space? No re-entry problem? And, heaven help us, *no Russians???*

People in general are aware of this turn of events and many a dear acquaintance turns to me with a happy smile and says: "What are you s-f writers going to write about, now that they're shooting to the Moon?"

(Fortunately, I have a reasonable answer to that question, which I invariably use. It's, "Oh, shut up.")

Space-flight isn't even the first great s-f concept stolen by scientific advance. What about atomic power? Robert Heinlein's story, "Blowups Happen," published in 1940, concerned life in a uranium-fission power plant. By war's end in 1945, most of the fantasy element had gone out of the story. Now nuclear power plants are hard fact and, as a matter of stern reality, the fission-power being made use

of today already bears the flavor of decay. We are looking forward to fusion power ahead and to solar power.

But this is past. What of the future? What may science-fiction writers (and readers) expect to have stolen in the years to come? Where will the thunder-thieves strike next? Nothing is safe.

At a party a few weeks ago, a guest was introduced to me as a research man at an electronics laboratory. I said, "And what are you working on these days?"

Very casually, he said (between yawns, as it were), "Powering space-stations."

"Ah," I said, trying to sound intelligent. "Designing compact generators for assembly in space."

"No, no," he said. "The generators will be here on Earth. We'll beam the energy." I smiled weakly. I had written stories at various times between 1941 and 1957 that dealt with beamed energy to or from space-stations. Now they were assaulting that bastion of the imagination, too.

Nothing is too "science-fictional" for the thunder-thieves.

Consider the question of "anti-matter." In 1934, the first of the "anti-particles," the positron, was discovered. It was just like an electron in mass and behavior, but whereas the electron was negatively charged, the positron was positively charged. The two were opposites.

In 1937, John D. Clark wrote a story called "Minus Planet," in which he envisioned anti-matter—with atoms made up of positrons circling negatively charged nuclei. (The actual atoms with which we are familiar contain electrons circling a positively charged nucleus.) A collision of anti-matter with ordinary matter involves a vast explosion since electrons and positrons combine to form pure energy. In Clark's story, a mass of anti-matter heading for the Earth is destroyed by having the Moon steered into its path.

But now the anti-proton has been artificially formed and anti-matter is no longer to be found only in the speculations of science fiction.

True, no one has actually been able to create anti-matter itself out of individual anti-particles, since any given anti-

particle only exists for a millionth of a second or less before combining with an ordinary particle and vanishing in a blaze of energy. However, astronomers such as Fred Hoyle (who has also taken to writing science fiction) are speculating on the possible existence of chunks of anti-matter elsewhere in the universe.

For instance, there are two galaxies in the constellation of Cygnus that are colliding and releasing incredible floods of radio waves. Is this just due to the turbulence of colliding dust clouds? Probably. On the other hand, what if one galaxy is matter and one anti-matter? Hoyle's calculations lead him to think the amount of energy being released as radio waves is just the amount a gradual matter/anti-matter collision would release.

There is also Messier 87, an unusually bright galaxy which emits copious radio waves although it is *not* colliding with another galaxy. Has it picked up a sizable gob of anti-matter somewhere that is not yet completely digested?

A physicist named Goldhaber, at Brookhaven, speculates that two universes were formed at the beginning, a universe of matter and an anti-universe of anti-matter, the two flying apart because of gravitational repulsion (anti-gravity).

But is such a thing as anti-gravity conceivable? There are electrostatic forces that attract (between unlike charges) and repel (between like charges). There are magnetic forces that attract (between unlike poles) and repel (between like poles). Gravitational forces, however, are only attractive and Einstein's theories make no provisions for anything like gravitational repulsion.

And yet, in the last month, I have read a report to the effect that, under special circumstances, subatomic particles acting as though they were made up of "negative mass" could be detected. "Negative mass" would be mass which, under the influence of a gravitational field would show an acceleration opposite in direction to that of "positive mass." In other words, something of negative mass would fall upward. In still other words, you have anti-gravity.

The implications of all this serious scientific work and thought is colossal. If you can find bodies of anti-matter

anywhere, you have a source of energy far greater per unit mass than even hydrogen-fusion. Anti-matter is a fuel that could convert all its own mass and an equivalent mass of ordinary matter into energy. Hydrogen-fusion converts less than one per cent of the mass of hydrogen into energy.

On the other hand, any sizable chunk of anti-matter would be the most dangerous explosive conceivable, and the most un-handleable. How, then, would it be handled?

Jack Williams, among others, dealt with this problem in his book, *See-Tee Shock*. (In those days, a long decade ago, anti-matter was called "contra-terrene matter" and "see-tee" is the phonetic equivalent of the abbreviation c. t.) But now the purely science-fictional quality of the notion is weakened.

Or suppose we can make (or find) negative mass in quantity and add it to the ordinary positive mass of a spaceship? Would we not have, possibly, a spaceship with a total of zero mass and hence zero inertia? Is not this the inertialess drive featured in E. E. Smith's famous "Lensman" stories?

Or if we had ways of varying the balance of positive and negative mass in the ship, we might maneuver in space by appropriately repelling or attracting cosmic bodies at any acceleration and do without power altogether—Oh, dreams, dreams!

Or are they dreams? How far can we expect the Thunder-Thieves to go?

If space is slipping out of the realm of s-f, what about time?

Einstein first suggested that time was not absolute; that to a person in motion, time passed more slowly than for a person at rest; and that with rapid motion, the difference in experienced time became sizable. With motion rapid enough, a speeding man could live one year while people on Earth were living through a million.

Various s-f writers have made use of this notion to allow their heroes to reach the stars. L. Sprague de Camp uses it routinely in his *Viagens Interplanetarias* stories and L. Ron Hubbard centered his story "To the Stars" about it.

Recently, physicists have argued violently as to whether

this "time dilatation" effect is a true one, or only an appearance depending on an observer's frame of reference. As an amazing sign of the times, this rarefied argument has reached the public press.

What is still more exciting is that a definite experiment is being planned to take the question out of the realm of argument and into that of observation. New "clocks" have been invented which measure time by counting the vibrations within molecules. These vibrations are so unvaryingly constant that the new clocks, called *masers* will keep time within one part in ten billion (that is, with an error of not more than a third of a second per century).

Now suppose you synchronize two masers, so they are vibrating exactly in time. Keep one maser on Earth and send one up in a satellite which will circle Earth at the usual speed of twenty thousand miles an hour, or thereabouts. At that rate of motion, time within the satellite, if slowed according to theory, will cause the maser to lag 1/20,000 of a second each day. The satellite maser, sending back its radioed signals, will move out of phase with the Earth maser.

Perhaps by the time this sees print, the experiment will be performed. If it proves the existence of time dilatation (as I rather think it will) it means distant galaxies can, theoretically, be reached in one man's lifetime. This will render old-fashioned such great stories as Heinlein's "Universe" in which generations of men were required for the voyage to other stars.

Of course, while one man is making an inter-galactic trip and back, uncounted generations are living and dying on Earth, so this also makes one type of time-travel—into the future—a conceivable possibility, and weakens the purity of still another science-fictional plot variety.

Nor is our own Earth safe! Do we write about robots? (I do.) Well, World War II saw the development of the computer to the kind of perfection that points (as yet but distantly) toward A. E. van Vogt's Games Machine in the "Null-A" stories. We now have computers which can be programed in such a way that they will play a fair game of

chess or translate from Russian to English.

Of course, these are tremendous machines. To get a true science-fictional robot, we need a man-shaped, man-sized computer. That means miniaturization.

The real space-consumers in computers are the radio-tubes, or analogous devices which act as stop-and-go devices that determine the exact routes followed by electric currents. Transistors, composed of tiny germanium crystals, do the work of radio-tubes in much smaller space. And now "cryotrons" are being developed. These are merely two wires at liquid helium temperatures. By making use of superconductivity (the tendency of certain metals to have zero resistance to an electric current at temperatures near absolute zero) these wires can be made to stop-and-go electric currents in even less space than do transistors.

Miniaturization is proceeding apace. Robots, tremble!

Or perhaps it is a matter of androids, rather than of robots. Perhaps you're thinking of mechanical men built out of artificial flesh and blood. Artificial life, to put it most bluntly.

Why not? Biochemists are isolating nucleoproteins from cells and are using them to synthesize proteins in the test-tube. (Nucleoproteins are the substances within cells that act as "blueprints" in protein formation.) Hemoglobin has thus been formed without the intervention of living, intact cells. Man is using the "blueprints" directly.

Experimenters at the Rockefeller Institute have taken nucleic acids out of cells and replaced them with synthetic polymers. Proteins continued being manufactured. Man, in a sense, was then using new and artificial "blueprints" for protein manufacture.

Is the interior of our Earth a mysterious domain, suitable only for science-fiction writers? So far, our only knowledge about it is indirect, derived from such things as earthquake shock-waves. These tell us, for instance, that the Earth's crust (which we can see and study) ends some miles under our feet and something else, called the "mantle" begins. The mantle is quite different from the crust, chemically and physically, but it cannot be studied by us, in the

sense that we can lay our hands upon it.

Or can it? The rather sharp dividing line between crust and mantle is called the Mohorovicic discontinuity (named after its discoverer). Its distance below Earth's surface varies; from thirty-five miles underneath the mountain belts to twenty miles under land surface generally to barely eight miles under the ocean basins.

And where the oceans are concerned, the first five or six miles down are water, which offers no resistance to a drill. There would thus only be two or three miles of actual rock to penetrate. There are preparations being made, now, for an attempt to drill through that relatively thin rock barrier so that samples of mantle can be brought up to the open light of day.

Among other science-fictional engineering feats being soberly considered by sober scientists is that of damming the Mediterranean at Gibraltar. The waters of the warm Mediterranean evaporate more quickly than they can be replaced by river flow and must therefore be fed by a continuous flow of Atlantic Ocean water through Gibraltar. Blocking this flow will cause a lowering of the Mediterranean sea-level and would allow the building of the greatest hydroelectric power station Earth has ever seen. (Great as would be the engineering problems, here, however, the political problems would be even greater. Sea-coasts would change, sea-ports go out of business. New land—belonging to which powers?—would come into existence, etc.)

But if all its thunder is being stolen, what is left to science fiction?

The answer is—*everything!*

Let us not forget the function of science fiction. It is not to predict particular scientific advances. It is not to tie itself inextricably to some particular type of plot—such as space-exploration.

Science fiction is, first and foremost, a branch of literature. It deals, first and foremost, with people. Its specialized character is the consideration of people in connection with scientific advance (or retreat). How do people respond to changes in their ways of life brought about by science; to

the new hopes; to the new fears?

The point of my story "Trends" lay not in the spaceship itself, which I didn't even describe, or the flight to the Moon, which I dismissed in one paragraph—but in the reaction of public opinion to a flight to the Moon. The story could be written again now, or in any year of the future. Changing the flight to the Moon to a trip to another galaxy or to a burrowing underground, or to the creation of the first artificial man, or to the development of a telepathy machine, is but the change of a trifling detail.

Heinlein in "Blowups Happen" wasn't interested primarily in the technology of a fission power-plant, but in the strains on the human technicians who ran it. The essentials of the story would not be changed if the fission plant were changed to a fusion plant or an anti-matter plant.

Whatever the rate of scientific advance, or its actual position at the moment, the capacity for further advance (whether for good or evil) is infinite.

The complexities of the human mind and the variety of ways in which it can react and interact is also infinite.

So, while science fiction deals with the effect of science on man, and man on science, the potentialities of science fiction are, and will remain, doubly infinite.

EDITOR'S NOTE: "Robots, tremble!" says Asimov—but he didn't tell the half of it. A few days after I received this article, I opened my newspaper to find a front-page article on a "machine language" developed by a young scientist at M.I.T. A vocabulary of 107 words (so far) now makes it possible for one machine to act as "foreman" for another—performing the programing that up till now has had to be done by a man. You tell the top machine what you want; it tells the slavey machine how to do it.

Another young man, this time at Cornell, is at work right now building a skimpy first working model of what he says will be the first really intelligent robot. "Dr. Rosenblatt . . . believes his 'perceptron' concept developed for the Navy, can provide electronic machines duplicating all functions of the human brain, including consciousness," says the UPI report. Which brings it very close to home for Dr. Asimov's famous science-fictional "positronic" robots.

—J. M.

THE YEAR'S SF

A Summary

If you do manage to lift yourself by your own bootstraps, do the boots come along? It seems to me they would! it's a "closed system," isn't it?

In which case, perhaps the analogy of a multiple-stage rocket would be more suitable to describe the present paradoxically successful plight of science fiction. . . .

"The trouble is, the whole world seems to have gone 'science-fictional' " Isaac Asimov wrote me, while preparing his article on "The Thunder-Thieves." "All sorts of mad ideas (or so they would have seemed a few years ago) are under serious investigation by scientists and—wonder of wonders—are reported in the press without either jokes or sneers."

What's more, the press (still somewhat ill-at-ease with the far-out notions "sober scientists" turn out to have) frequently refers to s-f to bridge the gap between the common-sense facts of a few years ago and the startling new scientific achievements—achievements "that only yesterday were science fiction."

It's not just the newspapers, either. The general magazines are printing more (and *better*) s-f all the time. Public libraries have special displays of new s-f. Several new s-f programs were announced for television at the start of the '58-'59 season.

And while all this was going on, the number of specialty s-f magazines on the newsstands plummeted from twenty-one, at the start of 1958, to ten at year's end.

These trends are not so contradictory as they may at first appear. Science fantasy is simply hoisting itself out of its own bootstraps—or leaving its booster tanks behind, as it levels into a new trajectory.

In a review of last year's *SF*, Anthony Boucher commented on the new non-fiction section, saying, "Much of the disciplined imagination we used to associate with science fiction now appears without fictional coating." And Asimov, in the same letter quoted before, said, "No matter how fast science progresses, it does not and cannot encroach upon science fiction—though between you and me it can encroach on s-f readers, by saturating them with science-advance, and depriving them of the need for s-f magazines."

I think Dr. Asimov is very right. It is worth noting in this connection that two of the magazines that suspended publication last year were replaced by "space" titles; and that John W. Campbell, Jr., who has edited the field's leading magazine, *Astounding*, for more than twenty years, called upon his readers last summer to subscribe to membership in a new "Society of Gentleman Amateurs"; the Society is to have its own journal, devoted exclusively to speculative science and engineering. (The rules would bar any working scientist from writing in his own field.)

Or consider these bits from a piece published last year on the possible future uses of parapsychology.

"The real idea . . . is to employ the waves or impulses for long-range transmission of messages, and even for the near-fantastic purpose of moving or influencing inanimate objects at great distances. . . . One group . . . has advanced the idea that the brain wave amplification concept offers a possible means of communication between space ships. . . ." And the theory is proposed "that the measurable electrical impulses given off by the human brain are products of a body chemical reaction much in the same way that noise is a product of a combustion engine, and that the true brain waves making possible extra-sensory perception are something else again and not yet understood. . . ."

The article also claims that many "scientists of the highest repute" have come to believe "that there definitely is a special group of humans having the power or gift of transferring thought from mind to mind, and influencing consistently the dice in a game of chance."

Now there would be nothing of special note in all this,

except that the scientists referred to are not the hand-picked group of known "crackpots" who would have been quoted in an article of the same sort in a science-fantasy magazine ten, five, or just two years ago. They are working engineers and research men at Westinghouse's laboratory in Friendship, Md., at the famous Rand Development Corporation in Cleveland, and at the Army's Redstone, Alabama, missile development center.

The article, which appeared in the Sunday *N. Y. Herald Tribune* on July 13, 1958, was written by that paper's military and aviation editor, Ansel E. Talbert. It starts out: "An amazing series of projects . . . are receiving serious study in the research branches of the United States armed forces." It closes with a paragraph quoting Col. William Bowers, director of biological sciences in the Air Force Office of Scientific Research, as being "tremendously interested" in finding out "whether messages and even energy emanating from the human brain can be transmitted over thousands of miles. . . ."

"Science-advance" and "disciplined imagination" are no longer the esoteric intellectual entertainment of a specialized cult; it is to be expected that the literature of logical speculation will not for long retain its discrete identity. And if any further evidence were needed, it could be found in the ranks of s-f authors: both in the fast-growing roster of new names attracted to science fantasy, and in the attitudes expressed by older writers in the field.

For the past three years, an annual Science-Fiction Writers' Conference has been held at Milford, Pa. Discussions at these meetings cover every facet of the writer's craft, with special reference to science fantasy: markets, agents, editors, critics, research sources, and the basic subjective problems of writing itself. During the 1958 sessions, one point of view emerged repeatedly: the writers who had been in s-f for any length of time, almost to a man wanted to get out—but to take it with them as they went. Some wanted the greater literary freedom of the book form; some wanted to get away from "gimmicks"; others wanted editors without established s-f conventions.

"I want to say the same kind of thing, but I'm tired of saying it to the same people," some of them summed it up. But one way or another, almost all wanted to write "a sort of s-f" or "something in between s-f and mainline fiction," for a wider market.

S-f (the category) is, if not dead, moribund; then long live s-f (the literature, and way of thinking)!

In a year of disquieting news all round in the s-f marketplace, the saddest single item—after the untimely deaths of Henry Kuttner and C. M. Kornbluth—was the retirement of Anthony Boucher from the editorial chair of *Fantasy and Science Fiction*. From its first issue in 1949, through five years of co-editorship by Boucher and J. Francis McComas, and five more of Mr. Boucher's solo guidance, *F&SF* reflected his distinctive editorial personality, and exercised a potent influence on science fantasy as a whole, by supplying a sorely needed critical standard to a field which had grown up with pulp traditions and which was often marked by careless prose and stock characterizations.

Wide erudition and keen intelligence are professional requirements for the science-fiction editor, but Tony Boucher was the first to add a discerning sensitivity to good writing.

Consoling notes: One of the reasons Boucher gave for leaving the magazine was the hope of finding more time for his own writing. And the selection of Robert P. Mills, who edited *F&SF's* (more brother, by its personality, than) sister magazine, *Venture*, to fill the slot on the older magazine, gives hope that the new *F&SF* will take on some of the invigorating freshness he injected into the short-lived *Venture*.

Also worthy of special mention is the changeover in *Satellite*, formerly a digest-size bimonthly, now a large-size, smooth-paper monthly magazine. The experiment with a "slick" format was last tried some years ago by Hugo Gernsback; from what I've seen so far of the new *Satellite*, I think its chances are a good bit better than *Science Fiction Plus* ever had. In any case, it's an effort everyone in

the field will be watching with interest, and one I personally hope will succeed.

Special mention for merit, outside the realm of the Honorable Mention listings that follow, go this year to:

Karen Anderson for "In Memoriam: Henry Kuttner," as heartfelt and apropos a eulogy as ever I have read or heard.

Vladimir Nabokov's *Nabokov's Dozen* (Doubleday), which contains some wonderful fantasy, reprints of previously printed stories.

Ron Smith, Dave Foley, and Bob Leman for their side-splitting parody of *F&SF* in *Inside Science Fiction*.

Peter Ustinov, whose publishers wouldn't permit us to include his charming *Atlantic* story, "The Man in the Moon" in this volume.

—J. M.

HONORABLE MENTIONS

The following books and magazines are represented in the Honorable Mentions list for 1958; abbreviations used in the list are indicated to the left of titles.

Science-Fantasy Magazines:

Amz	<i>Amazing Science Fiction Stories</i>
Ast	<i>Astounding Science Fiction</i>
F&SF	<i>Fantasy and Science Fiction</i>
Fant	<i>Fantastic</i>
FU	<i>Fantastic Universe</i>
Fut	<i>Future Science Fiction</i>
Gal	<i>Galaxy Science Fiction</i>
If	<i>If Magazine</i>
Inf	<i>Infinity Science Fiction</i>
Neb	<i>Nebula Science Fiction</i> (British)
NW	<i>New Worlds</i> (British)
OSFS	<i>Original Science Fiction Stories</i>

Satl	<i>Satellite Science Fiction</i>
SciF	<i>Science Fantasy</i> (British)
Star	<i>Star Science Fiction</i>
Sup	<i>Super-Science Fiction</i>
Vent	<i>Venture Science Fiction</i>

General Magazines:

Adam	<i>Adam</i>
Arg	<i>Argosy</i>
Atl	<i>Atlantic Monthly</i> (Anniversary Issue)
Cos	<i>Cosmopolitan</i>
Dec	<i>December</i>
Esq	<i>Esquire</i>
Harp	<i>Harper's</i>
Plby	<i>Playboy</i>
Rogue	<i>Rogue</i>
SEP	<i>Saturday Evening Post</i>
Swank	<i>Swank</i>

Books:

"MBM"	<i>A Mile Beyond the Moon</i> ; C. M. Kornbluth (Doubleday, 1958)
"SIS"	<i>Station in Space</i> ; James Gunn (Bantam, 1958)
"Star#4"	<i>Star Science Fiction Stories, #4</i> ; ed.: Frederik Pohl (Ballantine, 1958)
"TGR"	<i>The Graveyard Reader</i> ; ed.: Groff Conklin (Ballantine, 1958)
"TofS"	<i>A Touch of Strange</i> ; Theodore Sturgeon (Doubleday, 1958)
"TSS"	<i>The Other Side of the Sky</i> ; Arthur C. Clarke (Doubleday, 1958)
"F&SF:8"	<i>The Best of Fantasy and Science Fic- tion: Series 8</i> , Doubleday, 1959

POUL ANDERSON	"Backwardness," <i>F&SF:8</i>
	"The Apprentice Wobbler," <i>Star</i> , Jan.
	"The Last of the Deliverers," <i>F&SF</i> , Feb.

- ALAN ARKIN "People Soup," *Gal*, Nov.
 ROBERT ARTHUR "Notes on the Great Change," *Dec*, May.
 PAUL ASH "Big Sword," *Ast*, Oct.
 PAULINE ASHWELL "Unwillingly to School," *Ast*, Jan.
 ISAAC ASIMOV "S as in Zebatinsky," *Star*, Jan.
 "Lastborn," *Gal*, Sept.
 DON BERRY "Man Alone," *If*, Oct.
 ROBERT BLOCH "That Hell-Bound Train," *F&SF*, Sept.
 JOHN BRUNNER "Substitute God," *FU*, Aug.
 ALGIS BUDRYS "A World Named Mary" (pseud.: Robert Marner), *Vent*, May.
 "The End of Winter" (pseud.: William Scarff), *Vent*, Jan.
 ARTHUR C. CLARKE "The Songs of Distant Earth," *TSS*.
 HELEN CLARKSON "The Last Day," *Satl*, Apr.
 MARK CLIFTON "Remembrance and Reflection," *F&SF*, Jan.
 MILDRED CLINGERMAN "The Day of the Green Velvet Cloak," *F&SF*, July.
 THEODORE R. COGSWELL "Things," *F&SF*, May.
 JOHN BERNARD DALEY "Wings of the Phoenix," *Inf*, Apr.
 AVRAM DAVIDSON "Up the Close and Doun the Stair," *F&SF*, May.
 "The Grantha Sighting," *"F&SF:8"*
 CHAN DAVIS "It Walks in Beauty," *Star*, Jan.
 GORDON R. DICKSON "The Christmas Present," *F&SF*, Jan.
 "The Question," *Ast*, May.
 "Gifts," *Ast*, Nov.
 "Short Snorter," *If*, Aug.
 CHARLES EINSTEIN "Among the Dangs," *Esq*, June.
 GEORGE P. ELLIOTT "The Last Day," *Rogue*, Nov.
 HARLAN ELLISON "My Brother Paulie," *Satl*, Dec.
 "The Red Singing Sands," *Sup*, Feb.
 KOLLER ERNST "The Iowan's Curse," *Harp*, July.
 CHARLES G. FINNEY "A Summer Afternoon," *F&SF*, Feb.
 CHARLES L. FONTENAY "The New Science of Astronomy," *Fut*, Dec.
 DONALD FRANSON "Big Wide Wonderful World," *F&SF*, Mar.

- RANDALL GARRETT "Respectfully Mine," *Inf*, Aug.
 RON GOULART "Dream Girl," *F&SF*, Dec.
 "The Katy Dialogues," *F&SF*, July.
 JAMES E. GUNN "The Immortals," "*Star#4*"
 "Powder Keg," "*SIS*"
 "Deadly Silence," *FU*, Apr.
 HARRY HARRISON "Trainee for Mars," *FU*, June.
 FRANK HARVEY "100 Miles Up," *Arg*, Feb.
 ZENNA HENDERSON "Captivity," "*F&SF:8*."
 FRANK HERBERT "Cease Fire," *Ast*, Jan.
 PHILIP E. HIGH "Risk Economy," *Neb*, Feb.
 SHIRLEY JACKSON "The Omen," "*F&SF:8*."
 DANIEL KEYES "The Trouble With Elmo," *Gal*, Aug.
 JOHN KIPPAX "Me Myself and I," *SciF*, #27.
 DAMON KNIGHT "The Enemy," *Vent*, Jan.
 "Idiot Stick," "*Star#4*."
 C. M. KORNBLUTH "Theory of Rocketry," "*F&SF:8*."
 "Reap the Dark Tide," "*MBM*."
 FRITZ LEIBER "A Deskful of Girls," "*F&SF:8*."
 "Rump-Titty-Titty-Tum-TAH-Tee,"
F&SF, May.
 JACK LEWIS "Glossary of *Terms*," *FU*, Sept.
 VICTORIA LINCOLN "No Evidence," *F&SF*, Apr.
 KATHERINE MACLEAN "Unhuman Sacrifice," *Ast*, Nov.
 RICHARD MATHESON "The Edge," *F&SF*, Aug.
 T. H. MATHIEU "Cargo: Death," *Fut*, June.
 DEAN MCLAUGHLIN "The Man on the Bottom," *Ast*, Mar.
 SAM MERWIN, JR. "Lady in the Lab," *Adam*, II, 3.
 ALAN E. NOURSE "Hard Bargain," *Plby*, May.
 "The Gift of Numbers," *Sup*, Aug.
 FINN O'DONNEVAN "The Gun Without a Bang," *Gal*, June.
 CHAD OLIVER "The Space Horde," *Amz*, Feb.
 AVIS PABEL "Basic Agreement," *Ast*, Sept.
 FREDERIK POHL "The Wizards of Pung's Corners," *Gal*,
 Oct.
 ROBERT PRESSLIE "Another Word for Man," *NW*, Dec.
 "Dial 'O' For Operator," *SciF*, #27
 JOHN RACKHAM "One-Eye," *Ast*, May.
 KIT REED "Devotion," *F&SF*, June.
 MACK REYNOLDS "Pieces of the Game," *Ast*, Dec.

- JOEL TOWNSLEY ROGERS "Night of Horror," *SEP*, June 7.
 CHARLES W. RUNYON "First Man in a Satellite," *Sup*, Dec.
 MARGARET ST. CLAIR "Squee," *Fut*, Feb.
 THOMAS N. SCORTIA "The Avengers," *OSFS*, Sept.
 JOHN SHEPLEY "Gorilla Suit," "*F&SF*:8."
 ROBERT SILVERBERG "The Man Who Never Forgot," *F&SF*, Feb.
 "Slice of Life" (pseud.: Calvin M. Knox), *Inf*, Apr.
 CLIFFORD SIMAK "Leg. Forst.," *Inf*, Apr.
 "The Big Front Yard," *Ast*, Oct.
 CORDWAINER SMITH "The Burning of the Brain," *If*, Oct.
 "Western Science Is so Wonderful," *If*, Dec.
 WILL STANTON "Over the River to What's-Her-Name's-House," *F&SF*, May.
 JON STOPA "A Pair of Glasses," *Ast*, Apr.
 THEODORE STURGEON "The Graveyard Reader," "*TGR*."
 "A Touch of Strange," "*T of S*."
 WILLIAM TENN "Eastward Hol" *F&SF*, Oct.
 WALTER TEVIS "Far From Home," *F&SF*, Dec.
 PETER USTINOV "The Man in the Moon," *Atl* '58
 JACK VANCE "Worlds of Origin," *Sup*, Feb.
 JOAN VATSEK "The Duel," *F&SF*, May.
 KURT VONNEGUT, JR. "The Manned Missiles," *Cos*, July.
 PAUL WALLACH "Piggy," *Swank*, Dec.
 JAMES WHITE "Tableau," *NW*, May.
 JEANNE WILLIAMS "The Hunter and The Cross," *Fant.*, Aug.
 RICHARD WILSON "Man Working," "*Star*#4."
 JOHN WYNNDHAM "Idiot's Delight," *NW*, June.
 ROBERT F. YOUNG "Magic Window," *FU*, Aug.

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